SCIENCE

Index to Volume 193 July-September 1976

Editorial Board

ALFRED BROWN
JAMES F. CROW
WARD GOODENOUGH
CLIFFORD GROBSTEIN
HERBERT S. GUTOWSKY
N. BRUCE HANNAY
DONALD KENNEDY
HANS LANDSBERG

NEAL E. MILLER
EDWARD NEY
FRANK PRESS
FRANK W. PUTNAM
MAXINE F. SINGER
ARTHUR M. SQUIRES
RAYMOND H. THOMPSON

Editorial Staff

WILLIAM D. CAREY

HANS NUSSBAUM Business Manager

PHILIP H. ABELSON Editor

EARL J. SCHERAGO, Advertising Director

American Association for the Advancement of Science
1515 Massachusetts Avenue, NW, Washington, D.C. 20005

Printed in Richmond, Virginia, by William Byrd Press

Copyright 1976 by the American Association for the Advancement of Science

| Issue No. | Date | Pages | Issue No. | Date | Pages |
|-----------|-----------|---------|-----------|--------------|-----------|
| 4247 | 2 July | 1-84 | 4254 | 20 August | 621-712 |
| 4248 | 9 July | 85-176 | 4255 | 27 August | 713-828 |
| 4249 | 16 July | 177-260 | 4256 | 3 September | 829-928 |
| 4250 | 23 July | 261-352 | 4257 | 10 September | 929-1052 |
| 4251 | 30 July | 353-436 | 4258 | 17 September | 1053-1176 |
| 4252 | 6 August | 437-520 | 4259 | 24 September | 1177-1288 |
| 4253 | 13 August | 521-620 | | | |

The names of authors of books reviewed are in SMALL CAPITALS.

AAAS selects Congressional Science Fellows

AAAS selects Congressional Science Feriows for fourth consecutive year (AAAS), R. A. Scribner and M. C. Dolan, 41
Abelson, P. H. (editorials): Glamorous nuclear fusion 279; Viking 1, 723

and R. V. Ormes (editorial): Supporting seciety journals 9

ing society journals, 9 Abolition of direction selectivity in the visual cortex of the cat, M. Cynader and G. Chernenko, 504

Acetylcholine hot spots: development on myotubes cultured from aneural limb buds, A. Bekoff and W. J. Betz, 915 Acoustic tracking of ocean-dumped sewage

sludge, J. R. Proni et al., 1005 Acton, E. M., and H. Stone: Potential new artificial sweetener from study of structuretaste relationships, 584

Adventures of a mathematician, s. M. ULAM, book review by N. Metropolis, 567 Advisors, The, H. F. YORK, book review by F.

J. Dyson, 668 Afzelius, B. A.: A human syndrome caused

by immotile cilia, 317

Aggression and mating success in male spider mites, D. A. Potter et al., 160 Akgun, A. See Ertel, N. H., et al

ALI, M. A. (Ed.), Vision in fishes, book review of. 225

Allcock, H. R.: Polyphosphazenes: new polymers with inorganic backbone atoms, 1214 Alternative transformation behavior in sui-

fides: direct observations by transmission electron microscopy, A. Putnis, 417 Aluminum-26 in deep-sea sediment, J. L. Reyss et al., 1119

Ames assay, The (letters), A. Sivak and F. M. Loew, 272

Ancient lithosphere: its role in young continental volcanism, C. Brooks et al., 1086 Andersen, J. M., and J. M. Dietschy: Choles-

terogenesis: derepression in extrahepatic tissues with 4-aminopyrazolo[3,4-d]pyrimidine, 903

Anderson, D. W. See Sobelman, M., et al.
Andrews, J. T. See Nichols, H., et al. See also Wright, H. E., Jr.
Angell, C. A., and H. Kanno: Density maxima in high-pressure supercooled water and

liquid silicon dioxide, 1121

Aprison, M. H. See Hingtgen, J. N., et al. Argon content of the martian atmosphere at the Viking 1 landing site: analysis by x-ray fluorescence spectroscopy, B. C. Clark et

Asparaginase entrapped in red blood cells: action and survival, S. J. Updike et al., 681

Aspergillus flavus and aflatoxin in Iowa corn before harvest, E. B. Lillehoj et al., 495

Association Affairs: AAAS news, 41, 473, 876; annual meeting, 992

Astronomy and cosmology and Angkor Wat, R. Stencel et al., 281

Astronomy, architecture, and adaptation at Pueblo Bonito, J. E. Reyman, 957 Asymmetry and enzyme action, J. W. Corn-

Athey, R. D., Jr. See Hudson, H. T., et al. Atmospheres of Earth and the planets, B. M. MC CORMAC (Ed.), book review by J. W.

Chamberlain, 569 Atsatt, P. R., and D. J. O'Dowd: Plant de-

Atsatt, P. K., and D. J. O Dowd. Plant defense guilds, 24

Au, W. Y. W.: Cortisol stimulation of parathyroid hormone secretion by rat parathyroid glands in organ culture, 1015

Auerback, S. I., et al.: Environmental impact

statements (letters), 188 Autrup, H. See Weinstein, I. B., et al.

Baccalaureate origins of American scientists and scholars, M. E. Tidball and V. Kistia-

kowsky, 646 Bachur, N. R.: Cytoplasmic aldo-keto reductases: a class of drug metabolizing enzymes, 595

Background for the spheroidal nuclear model

proposal, J. Rainwater, 378
BAERENDS, G., et al. (Eds.), Function and evolution in behaviour, book review of, 993

Bahner, L. H. See Hansen, D. J., et al. Baird, A. K. See Clark, B. C., et al. BAKER, D. A., and J. L. HALL (Eds.), Ion transport in plant cells and tissues, book review of, 45

Bakkestrøm, E. See Witkin, H. A., et al. BALDING, P. See GOLD, E. R.

BALLS, M., and M. A. MONNICKENDAM (Eds.), Organ culture in biomedical research, book review of, 1115

Barium in Southern California coastal waters: a potential indicator of marine drilling con-

tamination, T. J. Chow, 57
Barlow, C. H., and B. Chance: Ischemic areas in perfused rat hearts: measurement by NADH fluorescence photography, 909
BARLTROP, J. A., and J. D. COYLE, Excited

states in organic chemistry, book review of,

Baron, L. S.: book review of Microbial drug

resistance, 756
Barondes, S. H. See Traynor, M. E., et al.
BARRINGTON, E. J. W. (Ed.), Trends in comparative endocrinology, book review of, 139 Barry, R. G. See Nichols, H., et al. Baum, W. A. See Carr, M. H., et al. Baylin, S. B., et al.: Clonal origin of inherited

medullary thyroid carcinoma and pheochro-

BECK, C. B. (Ed.), Origin and early evolution of angiosperms, book review of, 878 Beck, S. L., and D. L. Gavin: Susceptibility of mice to audiogenic seizures is increased by handling their dams during gestation,

BEER, C. See BAERENDS, G., et al. Behavioral fever in newborn rabbits, E. Satin-

off et al., 1139

Bekoff, A., and W. J. Betz: Acetylcholine hot spots: development on myotubes cultured from aneural limb buds, 915 Bender, P. L. See Stolz, A., et al. Bentor, Y. K., and M. Kastner: Combustion

metamorphism in Southern California, 486 Benzo[a]pyrene diol epoxides as intermediates in nucleic acid binding in vitro and in vivo, I. B. Weinstein et al., 592

Berg, P. See Singer, M. F. Bergman, S. See Emlen, S. T., et al. Bernheim, H. A., and M. J. Kluger: Fever: effect of drug-induced antipyresis on surviv-

Bernstein, L.: book review of Plants in saline

environments, 311 Bersohn, R. See Shank, C. V., et al. Bertolini, D. See Davidoff, F., et al.

Betz, W. J. See Bekoff, A.

Beimann, K. See Owen, T. Bill, R. G., and W. F. Herrnkind: Drag reduction by formation movement in spiny lob-

sters, 1143 Binder, A. B. See Mutch, T. A., et al. Binding of C-reactive protein to antigen-induced but not mitogen-induced T lympho-

blasts, S. M. Croft et al., 685 Binding of [14C]parathion in soil: a reassess-ment of pesticide persistence, J. Katan et

Bioconcentration of xenobiotics in trout bile: a proposed monitoring aid for some water-borne chemicals, C. N. Statham et al., 680 Biogeography of free-living soil nematodes

from the perspective of plate tectonics, V. R. Ferris et al., 508 Biological impact of small air ions, A. P. Krue-

ger and E. J. Reed, 1209

Bird, R. M.: book review of Plants, man and the land in the Vilcanota Valley of Peru, 669

Black, R. F.: book review of Glaciers and

landscape, 879 Black widow spider venom: effect of purified toxin on lipid bilayer membranes, A. Fin-

kelstein et al., 1009 Blackshear, W. T. See Michael, W. H., Jr., et

Blasius, K. R. See Carr, M. H., et al.

Blass, E. M. See Carr, M. H., et al. Blass, E. M. See Teicher, M. H. Blobstein, S. H. See Weinstein, I. B., et al. Boeck, W. L.: Meteorological consequences of atmospheric krypton-85, 195
Boffey, P. M. (News and Commen): grant ap-

plications and the stealing of ideas, 301; International Biological Program, 866; Kennedy and the National Science Foundation, 986; Morris and the vaccine program, 384; Office of Technology Assessment, 213, 660; "science court" and its feasibility, 129; swine flu vaccination campaign, 559; swine

flu vaccine lacks neuraminidase component, 1224: Teton Dam collapse, 30
Bogart, J. P., and M. Tandy: Polyploid amphibians: three more diploid-tetraploid cryptic species of frogs, 334

Bohr, A.: Rotational motion in nuclei, 203 BOHR, A., and B. R. MOTTELSON, Nuclear

BOHR, A., and B. R. MOTTELSON, Nuclear structure, book review of, 43
Bok, D. C.: Universities and national research policy (editorial), 955
Bonner, J. T.: book review of Crystals, fabrics, and fields, 477
Bormann, F. H. See Muller, R. N.
Bostick, W. L.: Clinical lab standards (letter),

Botulinum toxin: mechanism of presynaptic blockade, I. Kao et al., 1256

Boucek, M. M., and R. Snyderman: Calcium influx requirement for human neutrophil chemotaxis: inhibition by lanthanum chloride, 905

Boucher, D. H., et al .: Statistics and rare phe-

nomena (letters), 634 Bouton, J. H. See Smith, R. L., et al. Bowers, W. S., et al.: Discovery of insect anti-juvenile hormones in plants, 542 Brady, R. O.: Inherited metabolic diseases of

the nervous system, 733

Brainstem neurons without spontaneous unit discharge, J. M. Siegel and D. J. McGinty,

Brand, A., et al.: Lymphocyte-differentiating hormone of bursa of fabricius, 319

Brazel, A. J. See Durrenberger, R. W. Breast lobules, R. P. Rosier et al., 918 Brem, H. See Langer, R., et al. Brenkle, J. P. See Michael, W. H., Jr., et al. Brevet, A., et al.: Myosin synthesis increased

by electrical stimulation of skeletal muscle

cell cultures, 1152 Briggs, G. A. See Carr, M. H., et al. Brocksen, R. W. See Auerbach, S. I., et

Brooks, C., et al.: Ancient lithosphere: its role in young continental volcanism, 1086 Brooks, P. R.: Reactions of oriented molecules, 11

Brooks, R. R. See Jaffré, T., et al. Brown, E. D. See Smith, J. C., Jr., et al. Brown, J. W., and S. M. Malcom: Puerto Ri-

cans investigate underrepresentation in science professions (AAAS), 474 Brown pelican reproduction (letters), M. So-

belman et al., 96 Bryant, P. J. See French, V., et al. Bryant, S. V. See French, V., et al.

Buddemeier, R. W. See Macintyre, I. B., et

BURKE, D. C., and W. C. RUSSELL (Eds.), Control processes in virus multiplication, book

review of, 756
Bush, G. L., et al.: Screwworm eradication: inadvertent selection for noncompetitive ecotypes during mass rearing, 491

C

Cain, D. L. See Michael, W. H., Jr., et al Calcium-independent modulation of cyclic GMP and activation of guanylate cyclase by nitrosamines, F. R. DeRubertis and P. A. Craven, 897

Calcium influx requirement for human neutrophil chemotaxis: inhibition by lanthanum chloride, M. M. Boucek and R. Snyder-

man, 905

Calcium release from skeletal muscle sarcoplasmic reticulum: site of action of dantrolene sodium?, W. B. Van Winkle, 1130

Callen, E.: The science court (letter), 950 Calibrating duckweeds: light, clocks, metabolism, flowering, W. S. Hillman, 453

Campillo, A. J., et al.: Intensity dependence of the fluorescence lifetime of in vivo chlorophyll excited by a picosecond light

Campbell, D. B. See Tyler, G. L., et al. Campbell, D. B., et al.: New radar image of Venus, 1123

Carey, W. D. (editorials): Politics and reason, 535; R & D in the new budget, 101 Carr, M. H., et al.: Preliminary results from

the Viking orbiter imaging experiment, 766 Carrel, J. E., and R. D. Heathcote: Heart rate in spiders: influence of body size and foraging energetics, 148

Carter, C. L.: Habitat: a festive air, serious business (AAAS), 475

Carter, L. J. (News and Comment): auto safety and air bags, 1219; Carter's advisers, 868; coastal zone management, 216; energy conservation, 748; National Environmental Policy Act, 130; nuclear debate and Energy Research and Development Administration, 562; R & D spending and more jobs, 34; toxic pollutants, 216 Carter, W. E. See Stolz, A., et al.

Carter's engineering background (letters), R. E. Lamar et al., 948

CASTEEL, R. W., and G. I. QUIMBY (Eds.),

Maritime adaptations of the Pacific, book review of, 755

Catalysis by electron donor-acceptor complexes, K. TAMARU and M. ICHIKAWA, book review by M. Ratner, 880 Catchpole, A. J. W. See Moodie, D. W.

Catravas, G. N. See Redos, J. D., et al. Cellular pharmacology of excitable tissues, NARAHASHI (Ed.), BOOK REVIEW by B. I.

Century of chemistry, A, K. M. REESF (Ed.), book review by C. S. Marvel, 223
Chamberlain, J. W.: book review of Atmospheres of Earth and the planets, 569

Chamberlain, T. E. See Hess, S. L., et al. Chance, B. See Barlow, C. H. Chang, K.-P., and D. M. Dwyer: Multiplica-

tion of a human parasite (Leishmania donovani) in phagolysosomes of hamster macrophages in vitro, 678

Chang, P. C. See Teng, E. L., et al.
Chase, S. C., Jr. See Kieffer, H. H., et al.
Chauff, K. M. See Glenister, B. F., et al.
Chave, K. E. See Macintyre, I. B., et al.
Chen, F. F. See Gough, W. C., et al.

Cherkin, A., et al.: Memory: proline induces retrograde amnesia in chicks, 242 Chernenko, G. See Cynader, M. Chernoff, P. R.: Understanding mathematical

proofs: conceptual barriers (letter), 276 Chew, R.: book review of Rodents in desert

environments, 312

Childs, W. J. See Freedman, M. S., et al. Chirality in chemistry, V. Prelog, 17 Cholera toxin-peroxidase: changes in surface

labeling of glioblastoma cells with increased time in tissue culture, L. Manuelidis and E. E. Manuelidis, 588

Cholesterogenesis: derepression in extrahe-patic tissues with 4-aminopyrazolo[3,4-d]pyrimidine, J. M. Andersen and J. M. Dietschy, 903

Cholinergic changes during conditioned sup-pression in rats, J. N. Hingtgen et al., 332

Cholinergic mechanisms, P. G. WASER (Ed.), book review by E. L. Cohen, 226 Chow, T. J.: Barium in Southern California coastal waters: a potential indicator of ma-

rine drilling contamination, 57 Christiansen, K. O. See Witkin, H. A., et al. Chromosomal subunits in active genes have an altered conformation, H. Weintraub and M. Groudine, 848

Chuang, D. M., et al.: Enhanced template activity in chromatin from adrenal medulla after phosphorylation of chromosomal proteins, 60

Chýlek, P., et al.: Light scattering by irregular randomly oriented particles, 480 Circadian rhythms (letters), P. Kanciruk and

J. W. Lang, 8
City size effects, trends, and policies, I.

Hoch, 856 Clark, B. C., et al.: Argon content of the mar-

tian atmosphere at the Viking I landing site: analysis by x-ray fluorescence spectroscopy. 804

Clayton, C. L. See Pope, C. Clean air litigation (letters), C. Pope and C. L.

Clayton, 951 Cleere, J. S. See Bowers, W. S., et al. Clinical lab standards (letter), W. L. Bostick,

Clonal origin of inherited medullary thyroid carcinoma and pheochromocytoma, S. B. Baylin et al., 321

Cloud condensation nuclei on the Atlantic seaboard of the United States, L. F. Radke and P. V. Hobbs, 999 Cohen, E. L.: book review of Cholinergic

mechanisms, 226

COHEN, L. B., and P. SALAPATEK (Eds.), Infant perception, book review of, 478 Cohen, M. H. See Seifter, E., et al. Cole, H. L. See Hess, S. L., et al. Combustion metamorphism in Southern Cali-

fornia, Y. K. Bentor and M. Kastner, 486 Comings, D. E. See Holmquist, G. P.

Complete covalent structure of a human IgAl immunoglobulin, Y.-S. V. Liu et al., 1017

Composition and structure of the martian atmosphere: preliminary results from Viking

1, A. O. Nier et al., 786

Composition of the atmosphere at the surface of Mars: detection of argon-36 and preliminary analysis, T. Owen and K. Biemann,

Computers: reassuring but dispensable (let-ter), D. J. Montgomery, 836

Conditioning of *Pleurobranchaea*, R. M. Lee and G. J. Mpitsos, 72

Conodont pearls?, B. F. Glenister et al., 571 Conquest of will, The, A. MOWSHOWITZ (Ed.), book review by K. C. Laudon, 1111

Constancy and uniqueness in a large population of small interneurons, C. Goodman,

Construction of human tumor viruses? (letter), L. A. Loeb and K. D. Tartof, 27 Control processes in virus multiplication, D

c. BURKE and W. C. RUSSELL (Eds.), book review by N. P. Salzman, 756 Cook, W. S. See Nier, A. O., et al. Cooke, H. B. S.: book review of Geology of the Olduvai Gorge, 1234

Cookson, J. A., and A. L. Robinson: Ion beam analysis (letter), 1070 Cool, S. J. See McCall, R. B.

Conn, R. W., et al.: Fusion reactor design studies (letter), 630

Cooper, E. See Diamond, J., et al.

COOPER, J. P. (Ed.), Photosynthesis and productivity in different environments, book re-

view of, 670 Cooper, N. R. See Ferrone, S., et al Cope, F. W. See Damadian, R., et al.

COPPENS, Y., et al. (Eds.), Earliest man and environments in the Lake Rudolf basin, book review of, 1233

Copper supplementation in quaking mutant mice: reduced tremors and increased brain copper, C. L. Keen and L. S. Hurley, 244

Corcoran, G. B., III. See Nelson, S. D., et al. Cornforth, J. W.: Asymmetry and enzyme action, 121

Coronary arterial smooth muscle contraction by a substance released from platelets: evidence that it is thromboxane A2, E. F. Ellis et al., 1135

Cortisol stimulation of parathyroid hormone secretion by rat parathyroid glands in organ culture, W. Y. W. Au, 1015 Costa, E. See Chuang, D. M., et al. See also

Kurosawa, A., et al.

Costs and benefits of recombinant DNA re search (letters), F. J. Dyson and J. Weizenbaum, 6

Covers: barn owl and prey (20 Aug.); corner window, Pueblo Bonito, Chaco Canyon, New Mexico (10 Sept.); female Hunuman langurs charge male (3 Sept.); female opossum and young (23 July); gibbons and their coloration (16 July); Hohokam animal figures, probably representing deer (24 Sept.); Mars from Viking 1 lander (27 Aug.); Namib Desert beetle trails (6 Aug.); Southern Cross (2 July); tobacco nuclei superimposed HeLa cell and two HeLa nuclei (30 July); volcano El Misti (17 Sept.); waveform distortion patterns (13 Aug.); Western Desert of Egypt (9 July) Cowan, C. M. See Auerbach, S. I., et al.

COYLE, J. D. See BARLTROP, J. A. Crabill, N. L. See Masursky, H., and N. L.

Crabill

Cradle of the East, The, P.-T. HO, book review by R. Pearson, 395

Craig, R. B. See Auerbach, S. I., et al. CRANE, J., Fiddler crabs of the world, book review of, 396 Craven, P. A. See DeRubertis, F. R

Criminality in XYY and XXY men, H. A. Witkin et al., 547

Criteria for the discovery of chemical ele-

ments, B. G. Harvey et al., 1271 Croft, S. M., et al.: Binding of C-reactive protein to antigen-induced but not mitogen-induced T lymphoblasts, 685

Cross-linking of DNA in situ as a probe for chromatin structure, C. V. Hanson et al., Cryptoses choloepi: a coprophagous moth that lives on a sloth, J. F. Waage and G. G. Montgomery, 157

Crystals, fabrics, and fields, D. J. HARAWAY, book review by J. T. Bonner, 477

Cuellar, O.: Intraclonal histocompatibility in a parthenogenetic lizard: evidence of genetic homogeneity, 150

Culliton, B. J. (News and Comment): biomedical research probe begins, 32: biomedical training, 747; breast cancer and mammography, 555; confidentiality and academic researcher, 467; helping the dying die, 1105; Howard Hughes Medical Institute, 211; recombinant DNA and Cambridge moratorium, 300

Currie, D. G. See Stolz, A., et al. Cutts, J. A. See Carr, M. H., et al.

Cynader, M., and G. Chernenko: Abolition of direction selectivity in the visual cortex of the cat, 504

Cytochrome P-450 induction by phenobarbital and 3-methylcholanthrene in primary cultures of hepatocytes, G. Michalopoulos et al., 907

Cytokine inhibition of DNA synthesis: effect on cyclic adenosine monophosphate in lymphocytes, B. V. Jegasothy et al., 1260

Cytoplasmic aldo-keto reductases: a class of drug metabolizing enzymes, N. R. Bachur,

D

Dacre, J. C. See Muul, I., et al. Damadian, R., et al.: Structured water or pumps? (letters), 528

Damon, P. E., and S. M. Kunen: Global cool-

ing?, 447

Davidoff, F., et al.: $(+)-\alpha-(N-1)$ -phenethyl)urea stereospecifically inhibits Ca2+ but not ADP-stimulated mitochondrial respiration, 66 Davies, D. W. See Farmer, C. B., et al.

Davis, B. D.: Evolution, epidemiology, and recombinant DNA (letter), 442

Deep current measurements suggest long waves in the eastern equatorial Pacific, R. R. Harvey and W. C. Patzert, 883 Demographic data on the elderly (letter), G.

C. Myers, 358 DeLuca, H. F. See Eisman, J. A., et al. See also Harnden, D., et al.

Demong, N. J. See Emlen, S. T., et al. Demoulin, V., et al.: Preserving national forests (letter), 442

Density maxima in high-pressure supercooled water and liquid silicon dioxide, C. A. Angell and H. Kanno, 1121

Dent, J.: book review of Trends in comparative endocrinology, 139

Dental evidence on the origins of the Ainu and Japanese, C. G. Turner II, 911

DeRubertis, F. R., and P. A. Craven: Calcium-independent modulation of cyclid

GMP and activation of guanylate cyclase by nitrosamines, 897 DESMOND, A. J., The hot-blooded dinosaurs, book review of, 44

DETHIER, V. G., The hungry fly, book review

Dev. P. See Schmitt, F. O., et al. Diab, I. M., et al.: [3H]Morphine localization in myenteric plexus, 689
Diamond, J., et al.: Trophic regulation of

nerve sprouting, 371 Diamond, J. M., et al.: Island biogeography and conservation strategy and limitations, 1027

Diamond-blackfan syndrome: lymphocytemediated suppression of erythropoiesis, R. Hoffman et al., 899

Dietschy, J. M. See Andersen, J. M. Differential resource utilization by the sexes of dioecious plants, D. C. Freeman et al.,

Differentiation of differing concentrations of sucrose and glucose by human newborns, G. H. Nowlis and W. Kessen, 1267 1,25-Dihydroxyvitamin D in biological fluids: a simplified and sensitive assay, J. A. Eis-

man et al., 1021
Dinerstein, R. J. See Diab, I. M., et al.
Dinoflagellates: fossil motile-stage tests from the Upper Cretaceous of the Northern New Jersey Coastal Plain, F. E. May, 1128 Discovery of insect anti-juvenile hormones in

plants, W. S. Bowers et al., 542 DNA polymerase I: essential replication enzyme, I. R. Lehman and D. G. Uyemura,

DOBSON, P. N., JR., et al. (Eds.), Proceedings of the Sixth Hawaii Topical Conference in

Particle Physics, book review of, 995 Dolan, M. C. See Scribner, R. A. Donchin, E. See Squires, K. C., et al. Doomsday expectations (letter), W. E. Westman, 720

Dopamine-sensitive adenylate cyclase occurs in a region of substantia nigra containing do-paminergic dendrites, J. W. Kebabian and

J. M. Saavedra, 683 Downs, G. S. See Tyler, G. L., et al. Drachman, D. B. See Kao, I., et al.

Drag reduction by formation movement in spiny lobsters, R. G. Bill and W. F. Herrn kind, 1143

Drinking water and cancer mortality in Louisiana, T. Page et al., 55

Dritschilo, W. See Gordon, L., et al.

Dubos, R.: Symbiosis between the earth and humankind, 459 Duckett, R. J. See Nier, A. O., et al.

Dudek, G. See Mandula, B. B., et al.
Dufour's gland: source of sex pheromone in a

hymenopterous parasitoid, R. M. Weseloh, 695 Durrenberger, R. W., and A. J. Brazel: Need

for a better solar radiation data base, 1154 Dutton, R. G. See Hess, S. L., et al. Duvigneaud, J. See Demoulin, V., et al. Duxbury, T. See Carr, M. H., et al.

Dwyer, D. M. See Chang, K. P. Dyce, R. B. See Campbell, D. B., et al.

Dynamical properties of solids, D. K. HORTON and A. A. MARADUDIN (Eds.), book review by L. M. Falicov, 397 Dyson, F. J.: book review of The advisors,

and J. Weizenbaum: Costs and benefits of recombinant DNA research (letters),

\mathbb{R}

Earliest man and environments in the Lake Rudolf basin, Y. COPPENS et al. (Eds.), book review by V. J. Maglio, 1233 Earth rotation measured by lunar laser rang-

ing, A. Stolz et al., 997
Earth's core, The, J. A. JACOBS, book review by L. Knopoff, 311
Earthquake light (detter), J. J. Lloyd, 1070

Ebel, J. E. See Hadley, D. M., et al. Ecanow, B. See Foley, W. A., et al. Eckardt, M. J. See Cherkin, A., et al. Ecologic dilemmas, A. Wolman, 740 Editorials: Federal R & D and the economy,

1079; Glamorous nuclear fusion, 279; The impact statement-part II, 193; ciencia: new journal, new journey, 445; Politics and reason, 535; Preventive medicine, 837; An R & D delivery system, 637; R & D in the new budget system, 101; Scientists' meetings: collegial versus positional, 361; Supporting society journals, 9; To-ward a new partnership, 1199; Universities and national research policy, 955; Viking 1,

Edmond, J., et al.: Mevalonate metabolism: role of kidneys, 154

Effect of infrared transparency on the heat transfer through windows: clarification of the greenhouse effect, S. D. Silverstein,

Effect of stimulus sequence on the waveform of the cortical event-related potential, The, K. C. Squires et al., 1142

Ehrman, L. See Leonard, J. E. Eisman, J. A., et al.: 1,25-Dihydroxyvitamin

D in biological fluids: a simplified and sensitive assay, 1021

Electric signals and schooling behavior in weakly electric fish, Marcusenius prinoides L. (Mormyriformes), P. Moller,

Electron transfer chains and oxidative phosphorylation, E. QUAGLIARIELLO et al. (Eds.), book review by D. E. Green, 224 Electronic processing of information by brain

cells, F. O. Schmitt et al., 114

ELEFTHERIOU, B. E., and R. L. SPROTT (Eds.). Hormonal correlates of behavior, book review of, 881

Elementary modes of excitation in the nucleus, B. R. Mottelson, 287

Elevated plasma zinc: a heritable anomaly, J.

C. Smith, Jr. et al., 496 Ellis, E. F., et al.: Coronary arterial smooth muscle contraction by a substance released from platelets: evidence that it is thromboxane A2, 1135

El-Najjar, M. Y., and A. L. Robertson, Jr.: Spongy bones in prehistoric America, 141 Embryonal neoplasms in the opossum: a new model for solid tumors of infancy and childhood, W. Jurgelski, Jr., et al., 328

Emiliani, C. See Wright, H. E., Jr., et al. Emlen, S. T., et al.: Magnetic direction finding: evidence for its use in migratory indigo buntings, 505

Endolithic blue-green algae in the dry valleys: primary producers in the Antarctic desert ecosystem, E. I. Friedman and R. Ocampo, 1247

Energy partitioning in the products of ionic decomposition, J. L. Franklin, 725

Enhanced template activity in chromatin from adrenal medulla after phosphorylation of chromosomal proteins, D. M. Chuang et al., 60

Entropy estimates for some silicates at 298°K from molar volumes, S. J. Saxena, 1241 Environmental impact statements (letters), S.

I. Auerbach et al., 188 Epstein, E.: book review of Ion transport in

plant cells and tissues, 45 Epstein, S. S. See Page, T., et al. Erratum: for N. El-Hag and R. E. Morse [192, 1345 (1976)], 968

Errors in mathematical proofs (letter), R. Zahler, 98 Ertel, N. H., et al.: Radioimmunoassay for

colchicine in plasma and urine, 233 Erulkar, S. D. See Weight, F. F.

Erythrocyte sedimentation rates and malignancy: role of age and erythrocyte aggrega-W. A. Foley et al., 919

Ethanol-induced depletion of cerebellar guanosine 3',5'-cyclic monophosphate, J. D. Redos et al., 58
Etzioni, A.: Scientists' meetings: collegial ver-

sus positional (editorial), 361. See also Hud-

son, H. T., et al. Evans, D. S.: book review of Lowell and Mars, 754

Evenson, E. B. See Wright, H. E., Jr., et al. Evolution, epidemiology, and recombinant DNA (letter), B. D. Davis, 442

Evolving strategic arms and the technologist, R. Gerritsen and M. R. Gustavson, 917 Excited states in organic chemistry, J. BARLTROP and J. D. COYLE, book review by

H. E. Zimmerman, 670

Expanded approach to the problem of dis-appearing species, An. N. Myers, 198 Expression of C4 on human lymphoid cells and possible involvement in immune recognition phenomena, S. Ferrone et al., 53

Falicov, L. M.: book review of Dynamical properties of solids, 397 Falk, H. L. See Jurgelski, W., Jr., et al. Faller, J. E. See Stolz, A., et al. Falterman, K. See Langer, R., et al. Farmer, C. B., et al.: Viking: Mars atmo-

spheric water vapor mapping experimentpreliminary report of results, 776

Farrand, W. R. See Wright, H. E., Jr., et al. Federal R & D and the economy (editorial),

T. D. Long, 1079 Federico, P. See Neary, J. T., et al. Fennell, D. I. See Lillehoj, E. B., et al. Ferris, J. M. See Ferris, V. R., et al. Ferris, V. R., et al.: Biogeography of free-liv-

ing soil nematodes from the perspective of plate tectonics, 508

Ferrone, S., et al.: Expression of C4 on human lymphoid cells and possible involvement in immune recognition phenomena. 53

Fever: effect of drug-induced antipyresis on survival, H. A. Bernheim and M. J. Kluger,

Fiddler crabs of the world, J. CRANE, book review by B. Hazlett, 396 Filz, R. C. See Rothwell, P. L., et al.

Finkelstein, A., et al.: Black widow spider venom: effect of purified toxin on lipid bi-layer membranes, 1009

First Viking mission to Mars, The, G. A. Sof-fen and C. W. Snyder, 759 FITZHUGH, W. (Ed.), Prehistoric maritime ad-

aptations of the circumpolar zone, book review of, 755 Fixman, M.: book review of Molecular beha-

viour and the development of polymeric materials, 43
Fletcher, E. A.: Research funding for com-

pleted work? (letter), 1192

Flow field-flow fractionation: a versatile new separation method, J. C. Giddings et al., 1244

Fluctuations, instabilities, and phase transitions, T. RISTE (Ed.), book review by D. Mukamel, 995

Fog catchment sand trenches constructed by tenebrionid beetles, Lepidochora, from the Namib Desert, M. K. Seely and W. J. Hamilton III, 484

Fogelman, A. M. See Edmond, J., et al.
Foley, W. A., et al.: Erythrocyte sedimentation rates and malignancy: role of age and erythrocyte aggregation, 919

Folkman, J. See Langer, R., et al. Food, energy, and population (letters), L. Gordon et al., 1070
Frank, J. S. See Langer, G. A., et al.

Frankenberg, T. T. See Kramer, M. L., et al. Franklin, J. L.: Energy partitioning in the products of ionic decomposition, 725

FRAUMENI, J. F., JR. (Ed.), Persons at high risk of cancer, book review of, 397 Fredrickson, D. S.: Recombinant DNA guidelines: environmental impact statement

(letter), 1192 Freedman, M. S., et al.: Solar neutrinos: proposal for a new test, 1117

Freedom of information and NSF (letter), F.

J. Munger, 358
Freeman, D. C., et al.: Differential resource utilization by the sexes of dioecious plants, 597

French, J. B.: book review of Nuclear structure, 43

French, V., et al.: Pattern regulation in epimorphic fields, 969

FREY, R. W. (Ed.), The study of trace fossils, book review of, 223
Friedman, E. I., and R. Ocampo: Endolithic blue-green algae in the dry valleys: primary producers in the Antarctic desert

ecosystem, 1247 Friedman, R., and J. Iwai: Genetic predisposition and stress-induced hypertension, 161

Fuchs, L. H. See Freedman, M. S., et al. Fuhremann, T. W. See Katan, J., et al. Fuks, Z. See Slavin, S., et al.

Function and evolution in behaviour, G. BAE-RENDS et al. (Eds.), book review by J. P. Hailman, 993

Functional development of prefrontal cortex in rats continues into adolescence, B. Kolb and A. J. Nonneman, 335

Fusion as an energy option (letters), W. C. Gough et al., 1194 Fusion reactor design studies (letters), R. W. Conn et al., 630

G

Gabriel, M. See Hall, R. D., et al. GADE, D. W., Flants, man and the land in the Vilcanota Valley of Peru, book review of, 669

Gaff, T. M. See Hingtgen, J. N., et al. Galbally, I. E.: Man-made carbon tetrachloride in the atmosphere, 573

GALE, J. See POLJAKOFF-MAYBER, A. Gallo, R. See Morgan, D. A., et al.
Gamete competition in plants and animals, D.

MULCAHY (Ed.), book review by J. P.

Mascarenhas, 44
Gam, D. S. See Baylin, S. B., et al.
Gaskins, M. H. See Smith, R. L., et al.
Gautier, A. See Wendorf, F., et al.
Gavin, D. L. See Beck, S. L.

Genetic predisposition and stress-induced hypertension, R. Friedman and J. Iwai, 161 Gentry, R. L. See Kooyman, G. L., et al.

Geology of the Olduvai Gorge, R. L. HAY (Ed.), book review by H. B. S. Cooke, 1234 George, J. M.: Vasopressin and oxytocin are depleted from rat hypothalamic nuclei after hypertonic saline, 146

Gerald, P. S. See Boucher, D. H., et al. Gerbrandt, L. K. See Cherkin, A., et al. Gerritsen, R., and M. R. Gustavson: Evolving strategic arms and the technologist, 917

Gewurz, H. See Croft, S. M., et al. GHOSH, P. K. See PRAKASH, I.

Gibbons and their territorial songs, J. T. Marshall, Jr., and E. R. Marshall, 235 Giddings, J. C., et al.: Flow field-flow frac-

tionation: a versatile new separation method, 1244

Gifford, F. See Stencel, R., et al.
Gilbert, L. E.: Postmating female odor in Heliconius butterflies: a male-contributed an-

tiaphrodisiac?, 419 Giles, H. G. See Hsia, J. C., et al. Giles, K. L., and H. Whitehead: Uptake and continued metabolic activity of Azotobacter

within fungal protoplasts, 1125 Gilmour, D. G. See Brand, A., et al. Gingerich, O.: book review of A history of ancient mathematical astronomy, 476

Glacial surges and flood legends, H. E. Wright, Jr., et al., 1268 Glaciers and landscape, D. E. SUGDEN and B.

S. JOHN, book review by R. B. Black, 879 Glamorous nuclear fusion (editorial), P. H. Abelson, 279 Glander, K. E.: book review of The new

world primates, 1115

Glenister, B. F., et al.: Conodont pearls?, 571 Glickman, R. M., et al.: Localization of apolipoprotein B in intestinal epithelial cells, 1254

Global cooling?, P. E. Damon and S. M. Kunen, 447

Gold, B. H. See Foley, W. A., et al. GOLD, E. R., and P. BALDING, Receptor-specific proteins, book review of, 569 Goldberg, E. H. See Krco, C. J.

Goldstein, A.: Opioid peptides (endorphins)

in pituitary and brain, 1081 (endorphins) in pituitary and brain, 1081 (Goldstein, G. See Brand, A., et al. Goldstein, S. See Rosenbloom, A. L., et al. Goodenough, D. R. See Witkin, H. A., et al. Goodman, C.: Constancy and uniqueness

in a large population of small interneurons, 502

Goodman, L. S. See Freedman, M. S., et al. Gootman, P. M.: book review of The peripheral arterial chemoreceptors, 140 Gordon, L., et al.: Food, energy, and popu-

lation (letters), 1070

Goseco, C. G. See Ferris, V. R., et al. Gough, W. C., et al.: Fusion as an energy option (letters), 1194

Gould, J. L.: book review of The hungry fly,

Government talk (letter), W. Grierson, 272 Grams, G. W. See Chýlek, P., et al. Grant, W. D.: Microbial degradation of condensed tannins, 1137

Graus, R. R., and I. G. Macintyre: Light control of growth form in colonial reef corals: computer simulation, 895

Greany, R. H. See Miller, J. H. Greeley, R. See Carr, M. H., et al. Green, D. E.: book review of Electron transfer chains and oxidative phosphorylation. 224 Green, R. R. See Tyler, G. L., et al. Green, G. C. See Hess, S. L., et al. Grierson, W.: Government talk (letter), 272

Grierson, W.: Government talk (letter), 2/2 Groudine, M. See Weintraub, H. Guest, J. E. See Carr, M. H., et al. Guidotti, A. See Kurosawa, A., et al. Gustavson, M. R. See Gerritsen, R. Gwadz, R. W.: Malaria: successful immuniza-tion against the sexual stages of Plasmo-

dium gallinaceum, 1150

H

Haas, D. See Davidoff, F., et al. Habitat: a festive air, serious business (AAAS), C. L. Carter, 475 Hadley, D. M., et al.: Yellowstone: seismic evidence for a chemical mantle plume,

1237

Hailman, J. P.: book review of Function and evolution in behaviour, 993

Halbert, S. P. See Lin, T.-M. HALL, J. L. See BAKER, D. A.

Hall, R. D., et al.: Neuroelectric correlates of

conditioning, 246
Hamilton, W. J., III. See Seely, M. K.
Hammond, A. L. (Research News): coal research, 665, 750, 873; nuclear proliferation, 126, 217; oil and coal, 666; synthetic fuels option, 752

Hamstra, A. J. See Eisman, J. A., et al. Handedness in a Chinese population: biological, social, and pathological factors, E. L.

Teng et al., 1148
Hansen, D. J., et al.: Kepone: hazard to

aquatic organisms (letter), 528 Hanson, C. V., et al.: Cross-linking of DNA in situ as a probe for chromatin structure, 62

Hanson, W. B. See Nier, A. O., et al.
HARAWAY, D. J., Crystals, fabrics, and fields,
book review of, 477
Hardy, M. H.: book review of Organ culture

in biomedical research, 1115

Hardy-Weinberg law: asymptotic approach to a generalized form, A. E. Stark, 1141 Hargraves, R. B.: Precambrian geologic histo-

ry, 363

Harker, L. See Ross, R.
Harnden, D., et al.: Side chain metabolism of 25-hydroxy-[26,27-14C]vitamin D₃ and 1,25-dihydroxy-[26,27-14C]vitamin D₃ in vivo, 493

Harper, K. T. See Freeman, D. C., et al.

 Harris, C. See Weinstein, I. B., et al.
 Harris, D. R.: book review of Maritime adaptations of the Pacific and Prehistoric maritime adaptations of the circumpolar zone, 755

Harris, R. H. See Page, T., et al. Hart, S. S. Brooks, C., et al. Hartl, D. L. See Kettaneh, N. P.

Harvey, B. G., et al.: Criteria for the discovery of chemical elements, 1271

Harvey, R. G. See Weinstein, I. B., Harvey, R. R., and W. C. Patzert: Deep current measurements suggest long waves in the eastern equatorial Pacific, 883

HASHIMOTO, H. See MITSUHASHI, S. HAURY, E. W. (Ed.), The Hohokam: desert farmers and craftsmen, book review of,

Hauschka, S. D. See Lund, R. D. HAY, R. L. (Ed.), Geology of the Olduvai Gorge, book review of, 1234

Haynes, C. V. See Wendorf, F., et al. Hazlett, B.: book review of Fiddler crabs of

the world, 396 Hazlewood, C. F. See Damadian, R., et al Healey, T.: Linguistic deterrent? (letter), 98 Hearst, J. E. See Hanson, C. V., et al.

Heart rate in spiders: influence of body size and foraging energetics, J. E. Carrel and R. D. Heathcote, 148

Heathcote, R. D. See Carrel, J. E. Hecht, J.: Project on values and models of habitat to publish research plans (AAAS),

Hegyeli, A. F. See Muul, I., et al. Henry, R. M., See Hess, S. L., et al.

Herbicide (2,4-D) increases insect and pathogen pests on corn, I. N. Oka and D. Pimentel, 239

Herrmann, G. See Harvey, B. G., et al. Herrmkind, W. F. See Bill, R. G. Hess, S. L., et al.: Preliminary meteoro logi-cal results on Mars from the Viking I lander. 788

Hessler, J. See Freedman, M. S., et al. Hexagonal (wurtzite) form of silicon, A, H.
M. Jennings and M. H. Richman, 1242 Hierarchical relations among female hanuman langurs (primates: colobinae, Presbytis en-

tellus), S. B. Hrdy and D. B. Hrdy, 913 High-efficiency power cycle in which hydro-gen is compressed by absorption in metal hydrides, A, J. R. Powell et al., 314

High Rydberg atoms: newcomers to the atomic physics scene, R. F. Stebbings, 53' Hillman, W. S.: Calibrating duckweeds: light,

clocks, metabolism, flowering, 453 Hingtgen, J. N., et al.: Cholinergic changes during conditioned suppression in rats, 332 Hippocampus, The, R. L. ISAACSON and K. PRIBRAM (Eds.), book review by W. J. H.

Nauta, 1236

Hirschhorn, K. See Witkin, H. A., et al.
Histone transition during spermiogenesis is
absent in segregation distorter males of
Drosophila melanogaster, N. P. Kettaneh and D. L. Hartl, 1020

Histones and G banding of chromosomes, G. P. Holmquist and D. E. Comings, 599 History of ancient mathematical astronomy, A, O. NEUGEBAUER, book review by O. Gin-

gerich, 476

HO, P.-T., The cradle of the East, book review of, 395

Hobbs, P. B. See Radke, L. F. Hoch, I.: City size effects, trends, and policies, 856 Hoff, R. W. See Harvey, B. G., et al.

Hoffman, D. C. See Harvey, B. G., et al. Hoffman, F. O. See Auerbach, S. I., et al. Hoffman, R., et al.: Diamond-blackfan syndrome: lymphocyte-mediated suppression of erythropoiesis, 899

Hohokam, The: desert farmers and craftsmen, E. W. HAURY (Ed.), book review by J.

C. Kelley, 1234
Holden, C. (News and Comment): Air Force and ufologists, 663; hospices for the dying, 389; if I were the science adviser, 464; Lae trile, 982; Law Enforcement Assistance Administration, 36; Peterson to head citizens lobby group, 1221; science adviser installed, 746; Smithsonian Insect Zoo, 984; venoms and Jack Kilmon, 385. See also Walsh, J., and C. Holden

Holick, M. F. See Harnden, D., et al. Hollenbeck, R. See Chuang, D. M., et al. Holmquist, G. P., and D. E. Comings: His tones and G banding of chromosomes, 599

Holstein, B. R.: book review of Proceedings of the Sixth Hawaii Topical Conference in

Particle Physics, 995
Hooked trichomes: a physical plant barrier to

a major agricultural pest, E. A. Pillemer and W. M. Tingey, 482 Horel, J. A., and L. J. Misantone: Visual discrimination impaired by cutting temporal lobe connections, 336

Hormonal correlates of behavior, B. E. ELEF-THERIOU and R. L. SPROTT (Eds.), book review by D. B. Kelley, 881
Horsfall, J. G.: An R & D delivery system (editorial), 637

HORTON, G. K., and A. A. MARADUDIN (Eds.), Dynamical properties of solids, book review of. 397

Horwitz, E. P. See Freedman, M. S., et al. Hot-blooded dinosaurs, The, A. J. DESMOND, book review by R. J. Wassersug, 44 Houck, J. E. See Macintyre, I. B., et al.

How old are the eukaryotes?, J. W. Schopf and D. Z. Oehler, 47 Howland, B., and H. C. Howland: Subjective

measurement of high-order aberrations of the eye, 580

Howland, H. C. See Howland, B. HOYT, W. G., Lowell and Mars, book review of, 754

Hrdy, D. B. See Hrdy, S. B. Hrdy, S. B., and D. B. Hrdy: Hierarchical relations among female hanuman langurs (primates: colobinae, *Presbytis entellus*), 913 Hsia, J. C., et al.: Markers for detection of

supplementation in narcotic programs—deuterium-labeled methadone, 498

Hsu, S. H. See Baylin, S. B., et al. Huang, T. C., and N. D. Watkins: Volcanic dust in deep-sea sediments: relationship of microfeatures to explosivity estimates, 576 Hubbard, R.: Recombinant DNA: unknown risks (letter), 834

Huck, F. O. See Mutch, T. A., et al. Hudson, H. T., et al.: Paper mills and campus ethics (letters), 274

Hudson, P. M. See Jurgelski, W., Jr., et al.

Huggett, R. See Hansen, D. J., et al. Human malaria parasites in continuous culture, W. Trager and J. B. Jensen, 673 Human syndrome caused by immotile cilia,

A, B. A. Afzelius, 317 Hungry fly, The, V. G. DETHIER, book review by J. L. Gould, 567

Hunt, W. A. See Redos, J. D., et al. Hurley, L. S. See Keen, C. L.

Hutton, R. E. See Shorthill, R. W., et al. H-Y (male) antigen: detection of eight-cell mouse embryos, C. J. Krco and E. H. Gold-

berg, 1134 Hyde, E. K. See Harvey, B. G., et al. Hyperlipidemia and atherosclerosis, R. Ross and L. Harker, 1094

ICHIKAWA, M. See TAMARU, K. Identification of specific changes in the pattern of brain protein synthesis after training, V. E. Shashoua, 1264

Impact statement—part II, The (editorial), R. W. Peterson, 193

Induction of tyrosine 3-monooxygenase in adrenal medulla: role of protein kinase activation and translocation, A. Kurosawa et al.,

691 Infant perception, L. B. COHEN and P. SALA-PATEK (Eds.), book review by R. B. McCall and S. J. Cool, 478

Infante, A. See Liu, Y .- S., et al.

Infrared thermal mapping of the martian surface and atmosphere: first results, H. H. Kieffer et al., 780 Inherited metabolic diseases of the nervous

system, R. O. Brady, 733

Inositol isomers: occurrence in marine sedi-ments, R. H. White and S. L. Miller, 885 Insertion of DNA into vaccinia virus, The, C. Morgan, 591

Insulin binding to cultured human fibroblasts increases with normal and precocious aging, A. L. Rosenbloom et al., 412

Intensity dependence of the fluorescence lifetime of in vivo chlorophyll excited by a pi-cosecond light pulse, A. J. Campillo et al.,

Interciencia: new journal, new journey (editorial), M. Roche, 445

Interkingdom fusion between human (HeLa) cells and tobacco hybrid (GGLL) proto-plasts, C. W. Jones et al., 401 International decade of climatology (letter),

H. Nichols et al., 633

Interrelations among isotopically anomalous mercury fractions from meteorites and possible cosmological inferences, S. Jovanovic and G. W. Reed, Jr., 888 Intracellular 5-phosphoribosyl-1-pyrophos-

phate: decreased availability during glutamine limitation, S. D. Skaper et al., Intraclonal histocompatibility in a parthe-

nogenetic lizard: evidence of genetic homogeneity, O. Cuellar, 150 Ion beam analysis (letters), J. A. Cookson and

A. L. Robinson, 1070

Ion transport in plant cells and tissues, D. A. BAKER and J. L. HALL (Eds.), book review by E. Epstein, 45

Ippen, E. P. See Shank, C. V., et al. ISAAC, G. L. See COPPENS, Y., et al.

ISAACSON, R. L., and K. H. PRIBRAM (Eds.), The hippocampus, book review of, 1236 Ischemic areas in perfused rat hearts; mea-surement by NADH fluorescence photogra-phy, C. H. Barlow and B. Chance, 909

Island biogeography and conservation: strategy and limitations, J. M. Diamond et al., 1027

Isolation of cartilage factor that inhibits tumor neovascularization, R. Langer et al., 70 Isoniazid and iproniazid: activation of metabolites to toxic intermediates in man and rat, S. D. Nelson et al., 901

Ives, J. D. See Nichols, H., et al. Iwai, J. See Friedman, R.

J

JACOBS, J. A., The earth's core, book review of, 311

Jaeger, R. J.: Kepone chronology (letter), 94 Jaffré, T., et al.: Sebertia acuminata: a hyper-accumulator of nickel from New Caledonia,

James, D. E. See Brooks, C., et al.

Jarzembski, W. B. See Lamar, R. E., et al. Jeffrey, A. M. See Weinstein, I. B., et al. Jegasothy, B. V., et al.: Cytokine inhibition of DNA synthesis: effect on cyclic adenosine monophosphate in lymphocytes, 1260 Jennette, K. W. See Weinstein, I. B., et al. Jennings, H. M., and M. H. Richman: A hex

agonal (wurtzite) form of silicon, 1242

agonal (wurtzite) form of silicon, 1242 Jensen, H. M. See Rosier, R. P., et al. Jensen, J. B. See Trager, W. JOACHAIN, C. J., Quantum collision theory, book review of, 881

JOHN, B. S. See SUGDEN, D. E. Johnson, C. L., et al.: Plutonium hazard in respirable dust on the surface of soil, 488 Johnson, R. G.: book review of The study of trace fossils, 223

Johnston, D. E. See Potter, D. A., et al. Jones, C. W., et al.: Interkingdom fusion between human (HeLa) cells and tobacco

hybrid (GGLL) protoplasts, 401
Jovanovic, S., and G. W. Reed, Jr.: Interrelations among isotopically anomalous mercury fractions from meteorites and possible cosmological inferences, 888

Jurgelski, W., Jr., et al.: Embryonal neo-plasms in the opossum: a new model for solid tumors of infancy and childhood, 328 Juvenile hormone and pest control, B. G. Staal et al., 1032

KABACK, H. E., et al. (Eds.), Molecular aspects of membrane phenomena, book review of, 757 Kanciruk, P., and J. W. Lang: Circadian rhythms (letters), 8

Kang, Y. S. See Park, E. H. Kanno, H. See Angell, C. A. Kao, I., et al.: Botulinum toxin: mechanism

of presynaptic blockage, 1256 Kaplan, H. S. See Slavin, S., et al.

KARLIN, S., and E. NEVO (Eds.), Population genetics and ecology, book review of, 1112 netics and ecology, book review of, 1112
Karyotype conservation and difference in
DNA amount in anguilloid fishes, E. H.
Park and Y. S. Kang, 64
Kasai, H. See Weinstein, I. B., et al.
Kastner, M. See Bentor, Y. K.
Katan, J., et al.: Binding of [14C]parathion in

soil: a reassessment of pesticide persistence, 891

Katz, J. J. See Harvey, B. G., et al. Kaula, W. M. See Stolz, A., et al. Kaye, S. V. See Auerbach, S. I., et al. Kebabian, J. W., and J. M. Saavedra: Dopa-

mine-sensitive adenylate cyclase occurs in a region of substantia nigra containing do-paminergic dendrites, 683 Keen, C. L., and L. S. Hurley: Copper sup-

plementation in quaking mutant mice: reduced tremors and increased brain copper,

Keil, K. See Clark, B. C., et al.
Keller, J. M., and D. E. Riley: Nuclear ghosts: a nonmembranous structural component of mammalian cell nuclei, 399

Keller, O. L., Jr. See Harvey, B. G., et al. Kelley, D. B: book review of Hormonal correlates of behavior, 881

Kelley, J. C.: book review of The Hohokam: desert farmers and craftsmen, 1234 Kelly, G. M. See Michael, W. H., Jr., et

al Kende, H.: book review of The lytic compartment of plant cells, 312

Kepone chronology (letter), R. J. Jaeger, 94 Kepone: hazard to aquatic organisms (letter),

D. J. Hansen et al., 528 Kessen, W.: book review of Raising children in modern America: problems and prospective solutions and Raising children in mod-America: what parents and society should be doing for their children, 310. See also Nowlis, G. H.

Kettaneh, N. P., and D. L. Hartl: Histone transition during spermiogenesis is absent in segregation distorter males of Drosophila

melanogaster, 1020 Khorana, J. See Glickman, R. M., et al. Kieffer, J. D. See Neary, J. T., et al. Kieffer, H. H., et al.: Infrared thermal map-

ping of the martian surface and atmosphere: first results, 780

Kikuchi, W. K.: Prehistoric Hawaiian fish-ponds, 295

Kilgore, A. See Glickman, R. M., et al. Kilgore, A. See Glickman, R. M., et al. Kistiakowsky, V. See Tidball, M. E. Kitto, G. B. See Bush, G. L., et al. Klapper, G. See Glenister, B. F., et al. Klein, M. See Langer, R., et al. Klikoff, L. G. See Freeman, D. C., et al. Kluger, M. J. See Bernheim, H. A. Knight, T. C. D. See Nier, A. O., et al.

Knopoff, L.: book review of The earth's core, 311

Kobusiewicz, M. See Wendorf, F., et al. Kolata, G. B. (Research News): four-color conjecture, 564; jumping genes, 392 Kolb, B., and A. J. Nonneman: Functional de-

velopment of prefrontal cortex in rats continues into adolescence, 335 Kollman, V. H. See Campillo, A. J., et al. Konishi, M. See Pettigrew, J. D. Kooyman, G. L., et al.: Northern fur seal div-

ing behavior: a new approach to its study,

Koshland, D. E., Jr. See Zukin, R. S. Kotin, P. See Jurgelski, W., Jr., et al. Kovačević, R., and M. Radulovački: Mono-amine changes in the brain of cats during slow-wave sleep, 1025

Kramer, M. L., et al.: Snowfall observations from natural-draft cooling tower plumes,

Kranish, A.: Open debate (letter), 836 Krco, C. J., and E. H. Goldberg: H-Y (male) antigen: detection of eight-cell mouse em-

bryos, 1134 Kream, B. E. See Eisman, J. A., et al. Krueger, A. P., and E. J. Reed: Biological impact of small air ions, 1209

Krummel, J. See Gordon, L., et al. Kulcinski, G. L. See Conn, R. W., et al. Kumar, R. See Harnden, D., et al. Kunen, S. M. See Damon, P. E.

Kurosawa, A., et al.: Induction of tyrosine 3monooxygenase in adrenal medulla: role of protein kinase activation and translocation,

Kwolek, W. F. See Lillihoj, E. B., et al.

L

Lamar, R. E., et al.: Carter's engineering background (letters), 948

Lambinon, J. See Demoulin, V., et al. Lang, J. W. See Kanciruk, P. Langer, G. A., et al.: Sialic acid: effect of removal on calcium exchangeability of cultured heart cells, 1013 Langer, R., et al.: Isolation of cartilage factor

that inhibits tumor neovascularization, 70 LaPorte, D. D. See Farmer, C. B., et al. Laudon, K. C.: book review of The conquest of will, 1111

LEAKEY, R. E. F. See COPPENS, Y., et al. LeBlanc, A. E. See Hsia, J. C., et al. Lech, J. J. See Statham, C. N., et al.

LEDWITH, A., and A. M. NORTH (Eds.), Molec-ular behaviour and the development of polymeric materials, book review of, 43 Lee, J. See Jaffré, T., et al.

Lee, K. N.: book review of Of acceptable risk, 138

Lee, P. See Teng, E. L., et al. Lee, R. M., and G. J. Mpitsos: Conditioning of *Pleurobranchaea*, 72

Lefort, M. See Harvey, B. G., et al. Lehman, I. R., and D. G. Uyemura: DNA polymerase 1: essential replication enzyme,

Leonard, J. E., and L. Ehrman: Recognition and sexual selection in *Drosophila*: classifi-cation, quantification, and identification,

Leovy, C. B. See Hess, S. L., et al.

Lerner, J. L. See Freedman, M. S. et al. Leung, C. C. See Hsia, J. C., et al. Levin, B. R.: book review of Population genetics and ecology, 1112 Levings, C. S., III, and D. R. Pring: Restric-

tion endonuclease analysis of mitochondrial DNA from normal and Texas cytoplasmic

male-sterile maize, 158 Levinthal, E. C. See Mutch, T. A., et al. Lichtenstein, E. P. See Katan, J., et al. Liebes, S., Jr. See Mutch, T. A., et al. LIETH, H., and R. H. WHITTAKER (Eds.), Pri-

mary productivity of the biosphere, book review of, 138 Light control of growth form in colonial reef

corals: computer simulation, R. R. Graus and I. G. Macintyre, 895

and I. G. Macintyre, 895 Light flashes observed on Skylab 4: the role of nuclear stars, P. L. Rothwell et al., 1002 Light scattering by irregular randomly orient-ed particles, P. Chýlek et al., 480 Lightfoot, E. N., Jr. See Updike, S. J., et al. Like, A. A., and A. A. Rossini: Streptozoto-cin, induced pageragtic insulfites nou recelal.

cin-induced pancreatic insulitis: new model of diabetes mellitus, 415 Lillehoj, E. B., et al.: Aspergillus flavus and aflatoxin in lowa corn before harvest, 495

Lin, T.-M., and S. P. Halbert: Placental local-

ization of human pregnancy-associated plasma proteins, 1249
Ling, G. N. See Damadian, R., et al.
Linguistic deterrent? (letter), T. Healey, 98
Litt, M., and D. W. E. Smith: Reticulocyte transfer RNA and hemoglobin synthesis, 428

Littell, R. C. See Smith, R. L., et al. Liu, H. Z. See Jones, C. W., et al. Liu, Y.-S. V., et al.: Complete covalent struc-

ture of a human IgAl immunoglobulin, 1017 Lloyd, J. J.: Earthquake light (letter), 1070 Localization of apolipoprotein B in intestinal epithelial cells, R. M. Glickman et al., 1254 Loeb, L. A., and K. D. Tartof: Construction of human tumor viruses? (letter), 272

Loew, F. M. See Sivak, A.
Loftin, H. See Auerbach, S. I., et al.
Loh, H. See Wei, E.
Long, T. D.: Federal R & D and the economy
(editorial), 1079

Long-term survival of skin allografts in mice treated with fractionated total lymphoid ir-

radiation, S. Slavin et al., 1252 Lotker, M. See Gough, W. C., et al. Low, T. L. K. See Liu, Y.-S. V., et al.

Lowell and Mars, w. G. HOYT, book review by D. S. Evans, 754

LOWRANCE, w. w., Of acceptable risk, book review of, 138

Lund, R. D., and S. D. Hauschka: Transplanted neural tissue develops connections with host rat brain, 582

Lundsteen, C. See Witkin, H. A., et al. Lutton, J. D. See Hoffman, R., et al. Lymphocyte-differentiating hormone of bursa

of fabricius, A. Brand et al., 319 Lynch, J. F. See Diamond, J. M., et al. Lytic compartment of plant cells, The, P. MA-TILE, book review by H. Kende, 312

M

Macintyre, I. B., et al.: Skeletal calcite in living scleractinian corals: microboring fillings, not primary skeletal deposits, 701

Macintyre, I. G. See Graus, R. R. Macintyre, L. See Diamond, J., et al.

Maglio, V. J.: book review of Earliest man and environments in the Lake Rudolf basin, 1233 Mg²⁺, Ca²⁺-dependent adenosine triphos-phatase as receptor for divalent cations in bacterial sensing, R. S. Zukin and D. E. Koshland, Jr., 405

Magnetic direction finding: evidence for its use in migratory indigo buntings, S. T. Em-

len et al., 505 Malaria: successful immunization against the sexual stages of *Plasmodium gallinaceum*, R. W. Gwadz, 1150

Malcom, S. M. See Brown, J. W

Maler, B. A. See Martin, D. W., Jr.
Maloof, F. See Neary, J. T., et al.
Mandula, B. B., et al.: Photochemotherapy:
identification of a metabolite of 4,5',8-trimethylpsoralen, 1131

Man-made carbon tetrachloride in the atmosphere, I. E. Galbally, 573

Manuelidis, E. E. See Manuelidis, L. Manuelidis, L., and E. E. Manuelidis: Cholera toxin-peroxidase: changes in surface labeling of glioblastoma cells with increased time in tissue culture, 588

Marcus, H. See Hsia, J. C., et al. Maritime adaptations of the Pacific, R. W. CASTEEL and G. I. QUIMBY (Eds.), book re-

view by D. R. Harris, 755

Markers for detection of supplementation in programs-deuterium-labeled

methadone, J. C. Hsia et al., 498
Marsella, P. A. See Bowers, W. S., et al.
Marshall, E. R. See Marshall, J. T., Jr.
Marshall, J. T., Jr., and E. R. Marshall: Gib-

bons and their territorial songs, 235 Marshman, J. A. See Hsia, J. C., et al. Martin, D. W., Jr., and B. A. Maler: Phosphoribosylpyrophosphate synthetase is elevated in fibroblasts from patients with the Lesch-Nyhan syndrome, 408

Martin, T. Z. See Kieffer, H. H., et al.

Marvel, C. S.: book review of A century of chemistry, 223

Marx, J. L. (Research News); computers and nerve cell structure, 565; neurobiology and endogenous opiates, 1227; science and the press, 136

Mascarenhas, J. P.: book review of Gamete competition in plants and animals, 44 Mastrangelo, I. A. See Jones, C. W., et al. Masursky, H. See Carr, M. H., et al. and N. L. Crabill: The Viking landing

sites: selection and certification, 809 Matheny, R. T.: Maya lowland hydraulic systems, 639

MATILE, P., The lytic compartment of plant cells, book review of, 312

Maugh, T. H., II (Research News): hormone receptors and diabetes, 220; liquid membranes, 134; photochemical smog, 871; rere-

May, F. E.: Dinoflagellates: fossil motile-stage tests from the Upper Cretaceous of the Northern New Jersey Coastal Plain, 1128 Maya lowland hydraulic systems, R. T. Matheny, 639

Mayo, A. P. See Michael, W. H., Jr., et al. McCall, R. B., and S. J. Cool: book review of Infant perception, 478

MC CORMACK, B. M. (Ed.), Atmospheres of Earth and the planets, book review of, 569 McElroy, M. B. See Nier, A. O., et al.

McElroy, W. D.: Toward a new partnership

(editorial), 1199 McEwen, G. N., Jr. See Satinoff, E., et al. McGinty, D. J. See Siegel, J. M.

McLaughlin, D. J.: On Palaeosclerotium as a link between ascomycetes and basidiomycetes, 602

cetes, 602
McNeil, J. See Staal, G. B., et al.
McNulty, P. J. See Rothwell, P. L., et al.
Meck, R. A. See Jones, C. W., et al.
Mednick, S. A. See Witkin, H. A., et al.
Meinel, A. B., et al.: Trajectory of the Mt. St.
Augustine 1976 eruption ash cloud, 420
Meinel, M. P. See Meinel, A. B., et al. Melancon, M. J., Jr. See Statham, C. N., et

Membrane biogenesis, A. TZAGOLOFF (Ed.), book review by R. O. Poyton, 994

Memory: proline induces retrograde amnesia in chicks, A. Cherkin et al., 242 Meteorological consequences of atmospheric

krypton-85, W. L. Boeck, 195 Metropolis, N.: book review of Adventures of a mathematician, 567

Metz, W. D. (Research News): charm and the latest new particle, 990; fusion research, 38, 307. See also Conn. R. W., et al.

Mevalonate metabolism: role of kidneys, J. Edmond et al., 154
Meyerhof, W. E.: X-rays from coalescing

atoms, 839

Michael, W. H., Jr., et al.: Viking lander location and spin axis of Mars: determination from radio tracking data, 803

Michalopoulos, G., et al.: Cytochrome P-450 induction by phenobarbital and 3-methylcholanthrene in primary cultures of hepatocytes, 907

Microbial degradation of condensed tannins. W. D. Grant, 1137

Microbial drug resistance, s. MITSUHASHI and H. HASHIMOTO (Eds.), book review by L. S.

Microfossils in *Conophyton* from the Soviet Union and their bearing on Precambrian biostratigraphy, J. W. Schopf and Y. K. Sovietov, 143

Migration reversal: a regular phenomenon of Canada geese, D. G. Raveling, 153 Milam, J. R. See Smith, R. L., et al. Milau, J. S. See Powell, J. R., et al. Miller, J. D. See Hall, R. D., et al.

Miller, J. H., and R. H. Greany: Rhizoid differentiation in fern spores: experimental manipulation, 687

manipulation, 687
Miller, S. L. See White, R. H.
Miner, E. D. See Kieffer, H. H., et al.
Minkes, M. See Needleman, P., et al.
Misantone, L. J. See Horel, J. A.
Mitchell, J. L. See Hess, S. L., et al.
Mitchell, J. R. See Nelson, S. D., et al.

Mitochondria: system for prolonged maintenance and repeated measurements of energy-linked functions, R. J. Romani, 1258

MITSUHASHI, S., and H. HASHIMOTO (Eds.) Microbial drug resistance, book review of.

Mittler, J. C. See Ertel, N. H., et al. Modulation of C3b hemolytic activity by a plasma protein distinct from C3b in-activator, K. Whaley and S. Ruddy, 1011 Modulation of synaptic transmitter release by

repetitive postsynaptic action potentials, F. Weight and S. D. Erulkar, 1023 Molecular aspects of membrane phenomena. H. E. KABACK et al. (Eds.), book review by J. E. Thompson, 757

Molecular behaviour and the development of polymeric materials, A. LEDWITH and A. M. NORTH (Eds.), book review by M. Fixman,

Moller, P.: Electric signals and schooling be-havior in weakly electric fish, Marcusenius cyprinoides L. (Mormyriformes), 697

MONNICKENDAM, M. A. See BALLS, M. Monoamine changes in the brain of cats during slow-wave sleep, R. Kovačević and M.

Radulovački, 1025 Montgomery, D. J.: Computers: reassuring,

cinia virus, 591
Morgan, D. A., et al.: Selective in vitro growth of T lymphocytes from normal human bone marrows, 1007

Moore, H. J., II. See Shorthill, R. W., et al. See also Tyler, G. L., et al.

Morón, E. See Stencel, R., et al. Morphine analgesic tolerance: its situation specificity supports a Paylovian conditioning model, S. Siegel, 323

[3H]Morphine localization mventeric

plexus, I. M. Diab et al., 689

Morris, E. C. See Mutch, T. A., et al.

Mortensen, R. F. See Croft, S. M., et al.

Moss, D. N.; book review of Photosynthesis
and productivity in different environments,

Mottelson, B. R.: Elementary modes of excitation in the nucleus, 287

MOTTELSON, B. R. See BOHR, A.
Mover, H. See Neary, J. T., et al.
MOWSHOWITZ, A. (Ed.), The conquest of will,
book review of, 1111

MOYNIHAN, M. (Ed.), The new world primates, book review of, 111

Mpitsos, G. J. See Lee, R. M. Muir, D. W. See Timney, B. N. Mukamel, D.: book review of Fluctuations, in-

stabilities, and phase transitions, 995
MULCAHY, D. L. (Ed.), Gamete competition in

plants and animals, book review of, 44 Mulholland, J. D. See Stolz, A., et al. Muller, R. N., and F. H. Bormann: Role of Erythronium americanum Ker. in energy flow and nutrient dynamics of a northern hardwood forest ecosystem, 1126

Multiple sclerosis and high incidence of a B lymphocyte antigen, P. I. Terasaki et al., 1245

Multiplication of a human parasite (Leishmania donovani) in phagolysosomes of hamster macrophages in vitro, K.-P. Chang and D. M. Dwyer, 678

Multistable movement display: evidence for two separate motion systems in human vision, A, A. Pantle and L. Picciano, 500
Münch, G. See Kieffer, H. H., et al.
Munger, F. J.: Freedom of information and

NSF (letter), 358

Mutch, T. A., et al.: The surface of Mars: the view from the Viking 1 lander, 791 Muul, I., et al.: Toxicological testing dilemma

(letter), 834 Myers, G. C.: Demographic data on the elderly (letter), 358

Myers, M. N. See Giddings, J. C., et al. Myers, N.: An expanded approach to the problem of disappearing species, 198 Myosin synthesis increased by electrical stimulation of skeletal muscle cell cultures, A.

Brevet et al., 1152

Nakanishi, K. See Weinstein, I. B., et al. (Ed.), Cellular pharma NARAHASHI, T. cology of excitable tissues, book review of, 994

Nassar, S. G. See Staal, G. B., et al. Nauta, W. J. H.: book review of The hippocampus, 1236

Neary, J. T., et al.: Thyrotropin releasing hormone: development of inactivation system during maturation of the rat, 403 Neck, R. W. See Bush, G. L., et al.

Need for a better solar radiation data base. R. W. Durrenberger and A. J. Brazel, 1154 Needleman, P., et al.: Thromboxanes: selective biosynthesis and distinct biological properties, 163

Nelson, S. D., et al.: Isoniazid and iproniazid: activation of metabolites to toxic inter-mediates in man and rat, 901

Neugebauer, G. See Kieffer, H. H., et al. NEUGEBAUER, O., A history of ancient mathematical astronomy, book review of, 476 NEURATH, H. See KABACK, H. E., et al.

Neuroelectric correlates of conditioning, R. D. Hall et al., 246

Neurons selective for orientation and binocular disparity in the visual wulst of the barn owl (Tyto alba), J. D. Pettigrew and M. Ko-

NEVO, E. See KARLIN, S. New radar image of Venus, D. B. Campbell et al., 1123

New world primates, The, M. MOYNIHAN (Ed.), book review by K. E. Glander, 1115

Newman, F. C. See Proni, J. R., et al. News and Comment: Air Force and ufologists, 662; asbestos and National Academy of Sciences committee, 661; auto safety and air bags, 1219; B-1 and the cruise missile. 303; biomedical research probe begins, 32; biomedical training, 747; breast cancer and mammography, 555; British science policy, 132; Carter's advisers, 868; Carter as scientist or engineer, 462; Chinese earthquakes, 656; coastal zone management, 216; confidentiality and academic researcher, 467; cosmetic standards and pesticides, 744; crops and climatic changes, 1222; Dirks in at Central Intelligence Agency, 658; energy conservation, 748; Entomological Society of America, 658, 746; environmental research, 1103; France and nuclear power, 305; grant applications and the stealing of ideas, applications and the stealing of ideas, 301; Gros as Monod's successor, 466; Hargis and the Virginia Institute of Marine Sci-ences, 981, 1104; helping the dying die, 1105; history's quietest inquiry, 1100; hos-pices for the dying, 389; Howard Hughes Medical Institute, 211; if I were the science adviser, 464; industry R & D in decline, 466; International Biological Program, 866; Kachemak Bay oil spill, 131; Kennedy and the National Science Foundation, 986; Lae-trile, 982; Law Enforcement Assistance Administration, 36; Mathematica Inc. and the Central Intelligence Agency, 463; Morris and the vaccine program, 384; National Environmental Policy Act, 130; National Science Foundation directorship to become vacant, 558; nuclear debate and the Energy Research and Development Administration, 562; nuclear explosives and technology for on-site inspection, 743; nuclear exports and proliferation, 387; nuclear proliferation. 126, 217; Office of Technology Assessment, 213, 660; Peterson to head new citizens lobby group, 1221; R & D and economic growth, 1101; R & D spending and more jobs, 34; recombinant DNA, 215, 300, 468; "science court" and its feasibility, 129; Smithsonian Insect Zoo, 984, Soviet killer satellites, 865; Soviet state and Kronid Lyubarsky, 863; Stever as science adviser, 35, 465, 746; swine flu vaccination campaign, 559; swine flu vaccine lacks neuraminidase component, 1224; Teton Dam collapse, 30; toxic pollutants, 216; U.S.S.R. exchange rejected, 864; venoms and Jack Kilmon, 385

Newton, R. G.: book review of Quantum collision theory, 881

Nichols, H., et al.: International decade of climatology (letter), 633

Nier, A. O., et al.: Composition and structure of the martian atmosphere: preliminary results from Viking 1, 786 Nies, A. S. See Ellis, E. F., et al.

Nile, The, J. RZÓSKA (Ed.), book review by T. M. Zaret, 1114 Nimmo, D. R. See Hansen, D. J., et al.

Nitrogen fixation in grasses inoculated with Spirillum lipoferum, R. L. Smith et al.,

Nonneman, A. J. See Kolb, B.

NORTH, A. M. See LEDWITH, A. Northcutt, R. G.: book review of Vision in fishes, 225

Northern fur seal diving behavior: a new approach to its study, G. L. Kooyman et al.,

Notable Americans (letter). B. Sicherman. 442

Nowlis, G. H., and W. Kessen: Differentiation of differing concentrations of sucrose and glucose by human newborns, 1267

Nuclear ghosts: a nonmembranous structural component of mammalian cell nuclei, J. M. Keller and D. E. Riley, 399

Nuclear structure, A. BOHR and B. R. MOTTELson, book review by J. B. French, 43 Nudd, L. M. See Langer, G. A., et al.

0

Oates, J. A. See Ellis, E. F., et al. Ocampo, R. See Friedman, E. I. O'Dowd, D. J. See Atsatt, P. R. Odum, E. P.: book review of Primary produc-

tivity of the biosphere, 138 Oehler, D. Z. See Schopf, J. W., and D. Z.

Oehler

Oelz, O. See Ellis, E. F., et al. Of acceptable risk, w. w. LOWRANCE, book review by K. N. Lee, 138

Of stress, vitamin A, and tumors, E. Seifter et

Ohta, T. See Bowers, W. S., et al. Oka, I. N., and D. Pimentel: Herbicide (2,4-D) increases insect and pathogen pests on corn. 239

On Palaeosclerotium as a link between ascomycetes and basidiomycetes, D. J.

McLaughlin, 602 Ong, S. C. See Smith, J. C., Jr., et al. Opelz, G. See Terasaki, P. I., et al. Open debate (letter), A. Kranish, 836 Opioid peptides (endorphins) in pituitary and

brain, A. Goldstein, 1081
Opler, P. A. See Diamond, J. M., et al.
Organ culture in biomecical research, BALLS and M. A. MONNICKENDAM (Eds.), book review by M. H. Hardy, 1115

Orientation anisotropy: incidence and magnitude in Caucasian and Chinese subjects, B. N. Timney and D. W. Muir, 699

Origin and early evolution of angiosperms, c. B. BECK (Ed.), book review by J. M. Schopf,

Origin of pulmonate land snails, The (letter), R. Robertson, 251

Ormes, R. V. See Abelson, P. H.
Owen, D. R. See Witkin, H. A., et al.
Owen, T., and K. Biemann: Composition of
the atmosphere at the surface of Mars: detection of argon-36 and preliminary analysis. 801

Pachner, A. R. See Jegasothy, B. V., et

Pagano, R. R. See Wallace, R. K., et al. Page, I. H.: Preventive medicine (editorial), 837

Page, T., et al.: Drinking water and cancer mortality in Louisiana, 55

PAKVASA, S. See DOBSON, P. N., JR., et al. Palluconi, F. D. See Kieffer, H. H., et al. PALMIERI, F. See QUAGLIARIELLO, E., et al.

Panitch, M. (News and Comment): Kach-

emak Bay oil spill, 131
Pantle, A. A., and L. Picciano: A multistable movement display: evidence for two separate motion systems in human vision, 500 PAPA, S. See QUAGLIARIELLO, E., et al.

Paper mills and campus ethics (letters), H. T. Hudson et al., 274

Paracytic (syndetocheilic) stomata in carboniferous seed ferns, L. L. O. Stidd and B. M. Stidd, 156

Park, E. H., and Y. S. Kang: Karyotype con-servation and difference in DNA amount in anguilloid fishes, 64

Park, M. S. See Terasaki, P. I., et al. Parker, C. See Proni, J. R., et al.

Pathak, M. A. See Mandula, B. B., et al. Pattern regulation in epimorphic fields, V.

French et al., 969
Patterson, W. R. See Mutch, T. A., et al.
Patzert, W. C. See Harvey, R. R.
Payer, L. (News and Comment): Gros as Monod's successor, 466

Payne, N. A. See Ellis, E. F., et al. Peacock, J. See Brevet, A., et al.

Pearson, R.: book review of The cradle of the East. 395

Pellegrino, M. A. See Ferrone, S., et al. Peripheral arterial chemoreceptors, The, M. J. PURVES (Ed.), book review by P. M. Gootman. 140

Persons at high risk of cancer, J. F. FRAUM-ENI, JR. (Ed.), book review by C. White, 397 Peterson, R. W.: The impact statement-part II (editorial), 193

PETERSON, V. Z. See DOBSON, P. N., JR., et al. Pettengill, G. H. See Campbell, D. B., et al.

Pettigrew, J. D., and M. Konishi: Neurons selective for orientation and binocular disparity in the visual wulst of the barn owl

(Tyto alba), 675 (+)-\(\alpha\)-(N-1-phenethyl)urea stereospecifically inhibits Ca²⁺- but not ADP-stimulated mitochondrial respiration, F. Davidoff et al., 66

Philip, J. See Witkin, H. A., et al. Phosphoribosylpyrophosphate synthetase is elevated in fibroblasts from patients with the Lesch-Nyhan syndrome, D. W. Martin,

Jr., and B. A. Maler, 408 Photochemotherapy: identification of a metabolite of 4,5',8-trimethylpsoralen, B. B. Mandula et al., 1131

Photosynthesis and productivity in different environments, J. P. COOPER (Ed.), book review by D. N. Moss, 670

Physical dependence on opiate-like peptides,

E. Wei and H. Loh, 1262
Physical properties of the martian surface from the Viking I lander: preliminary results, R. W. Shorthill et al., 805

Picciano, L. See Pantle, A. A. Pillemer, E. A., and W. M. Tingey: Hooked trichomes: a physical plant barrier to a ma-

jor agricultural pest, 482 Pimentel, D. See Gordon, L., et al. See also Oka, I. N.

Pinnick, R. G. See Chýlek, P., et al. Pinto, E. See Brevet, A., et al. Pitot, H. C. See Michalopoulos, G., et al.

Placental localization of human pregnancy-as-sociated plasma proteins, T.-M. Lin and S. P. Halbert, 1249 Plafker, G.: Tectonic aspects of the Guate-

mala earthquake of 4 February 1976, 1201 Plant defense guilds, P. R. Atsatt and D. J. O'Dowd, 24

Plants in saline environments, A. POLJAKOFF-MAYBER and J. GALE (Eds.), book review by L. Bernstein, 311

Plants, man and the land in the Vilcanota Valley of Peru, D. W. GADE, book review by R. M. Bird. 669

Plutonium hazard in respirable dust on the surface of soil, C. J. Johnson et al., 488 Politics and reason (editorial), W. D. Carey,

POLJAKOFF-MAYBER, A., and J. GALE (Eds.), Plants in saline environments, book review

of 311 Pollack, J. B. See Mutch, T. A., et al.

Polyphosphazenes: new polymers with inorganic backbone atoms, H. R. Allcock,

Polyploid amphibians: three more diploid-tetraploid cryptic species of frogs, J. P. Bogart

and M. Tandy, 334

Pope, C., and C. L. Clayton: Clear air litigation (letters), 951

Popják, G. See Edmond, J., et al.

Population genetics and ecology, S. KARLIN

and E. NEVO (Eds.), book review by B. R. Levin, 1112

Poretz, R. D.: book review of Receptor-specific proteins, 569

Postmating female odor in Heliconius butterflies: a male-contributed antiaphrodisiac?: L. E. Gilbert, 419

Potential new artificial sweetener from study of structure-taste relationships, E. M. Acton and H. Stone, 584

Potter, D. A., et al.: Aggression and mating success in male spider mites, 160

Powell, J. R., et al.: A high-efficiency power cycle in which hydrogen is compressed by absorption in metal hydrides, 314

Poyton, R. O.: book review of Membrane biogenesis, 994 PRAKASH, I., and P. K. GHOSH (Eds.). Rodents

in desert environments, book review of, 312 Precambrian geologic history, R. B. Hargraves, 363

Prehistoric Hawaiian fishponds, W. K. Kikuchi, 295

Prehistoric maritime adaptations of the circumpolar zone, w. FITZHUGH (Ed.), book review by D. R. Harris, 755

Prehistory of the Egyptian Sahara, The, F. Wendorf et al., 103

Preliminary meteorological results on Mars from the Viking 1 lander, S. L. Hess et al.,

Preliminary results from the Viking orbiter imaging experiment, M. H. Carr et al., 766 Prelog, V.: Chirality in chemistry,

Preserving national forests (letter), V. Demoulin et al., 442

Preventive medicine (editorial), I. H. Page,

PRIBRAM, K. H. See ISAACSON, R. L.

Price, D. L. See Kao, I., et al. Primary productivity of the biosphere, н LIETH and R. H. WHITTAKER (Eds.), book review by E. P. Odum, 138

Pring, D. R. See Levings, C. S., III Proceedings of the Sixth Hawaii Topical Conference in Particle Physics, P. N. DOBSON JR., et al. (Eds.), book review by B. R. Hol-stein, 995

Project on values and models of habitat to publish research plan (AAAS), J. Hecht,

Proni, J. R., et al.: Acoustic tracking of ocean-dumped sewage sludge, 1005 Pryor, C. A. See Gordon, L., et al.

nerto Ricans investigate representation in science Puerto professions (AAAS), J. W. Brown and S. M. Malcom,

PURVES, M. J. (Ed.), The peripheral arterial chemoreceptors, book review of, 140 Putnam, F. W. See Liu, Y.-S. V., et al. Putnis, A.: Alternative transformation behav-

ior in sulfides: direct observations by transmission electron microscopy, 417

QUAGLIARIELLO, E., et al. (Eds.), Electron transfer chains and oxidative phosphorylation, book review of, 224 Quantum collision theory, C. J. JOACHAIN.

book review by R. G. Newton, 881 Quesenberry, K. H. See Smith, R. L., et al. QUIMBY, G. 1. See CASTEEL, R. W.

R

R & D delivery system, An (editorial), J. G. Horsfall, 637

R & D in the new budget system (editorial), W. D. Carey, 101

Radar characteristics of Viking 1 landing sites, G. L. Tyler et al., 812 RADDA, G. K. See KABACK, H. E., et al.

Radioimmunoassay for colchicine in plasma and urine, N. H. Ertel et al., 233 Radke, L. F., and P. V. Hobbs: Cloud con-densation nuclei on the Atlantic seaboard of

the United States, 999

Radulovački, M. See Kovačević, R. Rainwater, J.: Background for the spheroidal nuclear model proposal, 378

Raising children in modern America: problems and prospective solutions, N. B. TAL-BOT (Ed.), book review by W. Kessen, 310

Raising children in modern America: what parents and society should be doing for their children, N. B. TALBOT, book review by W. Kessen, 310

Ratner, M.: book review of Catalysis by electron donor-acceptor complexes, 880 Raveling, D. G.: Migration reversal: a regular

phenomenon of Canada geese, 153 Raz, A. See Needleman, P., et al.

Reactions of oriented molecules, P. R. Brooks, 11 Reasenberg, R. D. See Michael, W. H., Jr., et

Receptor-specific proteins, E. R. GOLD and BALDING, book review by R. D. Poretz, 569 Recognition and sexual selection in Drosophila: classification, quantification, and identification, J. E. Leonard and L. Ehrman, 693

Recombinant DNA guidelines: environmental impact statement (letter), D. S. Fredrick-

Recombinant DNA: NIH guidelines (letter), M. F. Singer and P. Berg, 186 Recombinant DNA: unknown risks (letter),

R. Hubbard, 834

Redos, J. D., et al.: Ethanol-induced depletion of cerebellar guanosine 3',5'-cyclic monophosphate, 58

Reed, E. J. See Krueger, A. P. Reed, G. W., Jr. See Jovanovic, S. REESE, K. M. (Ed.), A century of chemistry, book review of, 223

Reeves, R. D. See Jaffré, T., et al. Reeves, R. W. See Kramer, M. L., et al. Reichle, D. E. See Auerbach, S. I., et al. Research funding for completed work? (letter),

E. A. Fletcher, 1192 Research News: animal behavior, 989; charm and the latest new particle, 990: chemists' first try at big science, 471; coal research, 665, 750, 873; computational chemistry, 470: computers and nerve cell structure. 565; four-color conjecture, 564; fusion research, 38, 307; hormone receptors and diabetes, 220; infrared photochemistry, 1230; jumping genes, 392; liquid membranes, 134; neurobiology and endogenous opiates, neurobiology and endogenous opiates, 1227; oil and coal, 666; photochemical smog, 871; rerefined oil, 1108; science and the press, 136; synthetic fuels option, 752; x-ray evidence for superheavy elements,

Restriction endonuclease analysis of mitochondrial DNA from normal and Texas cytoplasmic male-sterile maize, C. S. Lev-

ings, III, and D. R. Pring, 158
Reticulocyte transfer RNA and hemoglobin synthesis, M. Litt and D. W. E. Smith, 428 Reyman, J. E.: Astronomy, architecture, and

adaptation at Pueblo Bonito, 957 Reyss, J. L., et al.: Aluminum-26 in deep-sea sediment, 1119

Rhizoid differentiation in fern spores: experimental manipulation, J. H. Miller and R. H.

Greany, 687 Rice, J. D. See Rosier, R. P., et al. Richman, M. H. See Jennings, H. M. Riley, D. E. See Keller, J. M.

V. See Foley, W. A., et al. See also

Seifter, E., et al.
Risebrough, R. W. See Sobelman, M., et al.
RISTE, T. (Ed.), Fluctuations, instabilities, and phase transitions, book review of, 995 Robbins, C. S. See Diamond, J. M., et al.

Roberts, L. J., II. See Ellis, E. F., et al. Robertson, A. L., Jr. See El-Najjar, M. Y Robertson, R.: The origin of pulmonate land snails (letter), 251

Robinson, A. L. (Research News): chemists first try at big science, 471; computational chemistry, 470; infrared photochemistry, 1230; x-ray evidence for superheavy elements, 219. See also Cookson, J. A.

Roche, M.: Interciencia: new journal, new journey (editorial), 445

Rodents in desert environments, 1. PRAKASH and P. K. GHOSH (Eds.), book review by R. Chew, 312

Rohlfing, D. L.: Thermal polyamino acids: synthesis at less than 100°C, 68

Role of Erythronium americanum Ker. in energy flow and nutrient dynamics of a northern hardwood forest ecosystem, R. N. Muller and F. H. Bormann, 1126

Romani, R. J.: Mitochondria: system for prolonged maintenance and repeated measurements of energy-linked functions, 1258

Rose, H. J., Jr. See Clark, B. C., et al. Rose, R. M. See Wallace, R. K., et al. Rosenbloom, A. L., et al.: Insulin binding to cultured human fibroblasts increases with

normal and precocious aging. 412 Rosier, R. P., et al.: Breast lobules, 918 Ross, R., and L. Harker: Hyperlipidemia and atherosclerosis, 1094

Rossini, A. A. See Like, A. A. Rotational motion in nuclei, A. Bohr, 203 Roth, L. J. See Diab, I. M., et al. Rothwell, P. L., et al.: Light flashes observed on Skylab 4: the role of nuclear stars, 1002

Rubin, L. L. See Finkelstein, A., et al. Ruddy, S. See Whaley, K. Ruscetti, F. W. See Morgan, D. A., et al.

RUSSELL, W. C. See BURKE, D. C. Ryan, J. A. See Hess, S. L., et al.

RZÓSKA, J. (Ed.), The Nile, book review of,

S

Saavedra, J. M. See Kebabian, J. W. Sagan, C. See Mutch, T. A., et al. Said, R. See Wendorf, F., et al. Sallapatek, P. See COHEN, L. B.
Saltwick, S. E. See Hall, R. D., et al.
Salzano, F. J. See Powell, J. R., et al.
Salzana, N. P.: book review of Control processes in virus multiplication, 756 Satinoff, E., et al.: Behavioral fever in newborn rabbits, 1139

Sattler, C. A. See Michalopoulos, G., et al. Sattler, G. L. See Michalopoulos, G., et al. Saxena, S. J.: Entropy estimates for some silicates at 298°K from molar volumes, 1241 Schank, S. C. See Smith, R. L., et al.

Schild, R. See Wendorf, F., et al.
Schimmel, S. C. See Hansen, D. J., et al.
Schimmel, S. C. See Hansen, D. J., et al.
Schindler, D. W. See Auerbach, S. I., et al.
Schlapfer, W. T. See Traynor, M. E., et al.
Schmitt, F. O., et al.: Electronic processing of information by brain cells, 114

Schoning, R. W. See Gordon, L., et al. Schopf, J. M.: book review of Origin and early evolution of angiosperms, 878 Schopf, J. W., and D. Z. Oehler: How old are

the eukaryotes?, 47

Schopf, J. W., and Y. K. Sovietov: Micro-fossils in *Conophyton* from the Soviet Union and their bearing on Precambrian biostratigraphy, 143 Schulsinger, F. See Witkin, H. A., et al.

SCHWYZER, R. See KABACK, H. E., et al. Science court, The (letter), E. Callen, 950 Science Court experiment: an interim report, The, Task Force of the Presidential Advisory Group on Anticipated Advances in Science and Technology, 653

Scientists and lawyers explore weather modification at AAAS-ABA conference (AAAS), W. A. Thomas, 473

Scientists' meetings: collegial versus positional (editorial), A. Etzioni, 361

Scott, R. F. See Shorthill, R. W., et al. Screwworm eradication: inadvertent selection for noncompetitive ecotypes during

mass rearing, G. L. Bush et al., 491 Scribner, R. A., and M. C. Dolan: AAAS se-lects Congressional Science Fellows for fourth consecutive year (AAAS), 41

Seaborg, G. T. See Harvey, B. G., et al. Sebertia acuminata: a hyperaccumulator of nickel from New Caledonia, T. Jaffré et al.,

Seegmiller, J. E. See Skaper, S. D., et al.

Seely, M. K., and W. J. Hamilton III: Fog catchment sand trenches constructed by tenebrionid beetles, Lepidochora, from the Namib Desert, 484

Seiff, A. See Nier, A. O., et al. Seifter, E., et al.: Of stress, vitamin A, and tumors, 74

Selective in vitro growth of T lymphocytes from normal human bone marrows, D. A. Morgan et al., 1007

Sellers, R. L. See Proni, J. R., et al. Sen, A., and G. J. Todaro: Specificity of in vi-

tro binding of primate type C viral RNA and the homologous viral p12 core protein, 326 Seraydarian, K. See Langer, G. A., et al. Severson, R. C. See Johnson, C. L., et al.

Sex and the single hemisphere: specialization of the right hemisphere for spatial processing, S. F. Witelson, 425 Seymour, D. E. See Kramer, M. L., et al. Shank, C. V., et al.: Time-resolved spectros-

copy of hemoglobin and its complexes with subpicosecond optical pulses, 50

Shapiro, B. I.: book review of Cellular phar-

Shapiro, B. I.: book review of Cellular pharmacology of excitable tissues, 994
Shapiro, I. I. See Michael, W. H., Jr., et al.
Shapiro, S. L. See Campillo, A. J., et al.
Shapley, D. (News and Comment): B-1 and the cruise missile, 303; Chinese earthquakes, 656; crops and climatic changes, 222; Dirks in at the Central Intelligence Agency, 658; Hargis and The Virginia Institute of Marine Sciences, 981, 1104; industry R & D in decline, 466; Mathematica Inc. and the Central Intelligence Agency, 463; nuclear explosives and technology for onsite inspection, 743; Soviet killer satellites,

Shashoua, V. E.: Indentification of specific changes in the pattern of brain protein syn-

thesis after training, 1264 Shaw, G. E. See Meinel, A. B., et al.

Shea, P. A. See Hingtgen, J. N., et al.
Shelus, P. J. See Stolz, A., et al.
Shen, C. J. See Hanson, C. V., et al.
Shorthill, R. W., et al.: Physical properties of
the martian surface from the Viking 1 land-

er: preliminary results, 805 Sialic acid: effect of removal on calcium ex-

changeability of cultured heart cells, G. A. Langer et al., 1013

Sicherman, B.: Notable Americans (letter),

Side chain metabolism of 25-hydroxy-[26,27- 14 C] vitamin D₃ and 1,25-dihydroxy-[26,27- 14 C] vitamin D₃ in vivo, D. Harnden *et al.*, 493

Siegel, J. M., and D. J. McGinty: Brainstem neurons without spontaneous unit dis-

charge, 240

Siegel, S.: Morphine analgesic tolerance: its situation specificity supports a Pavlovian conditioning model, 323

SILIPRANDI, N. See QUAGLIARIELLO, E., et al. Silverberg, E. C. See Stolz, A., et al.
Silverstein, S. D.: Effect of infrared trans-

parency on the heat transfer through windows: a clarification of the greenhouse effect, 229

Simberloff, D. S. See Diamond, J. M., et al. Simon, W. E. See Hess, S. L., et al. Singer, M. F., and P. Berg: Recombinant DNA: NIH guidelines (letter), 186

Sivak, A., and F. M. Loew: The Ames assay

(letters), 272
Skaper, S. D., et al.: Intracellular 5-phosphoribosyl-1-pyrophosphate: decreased availability during glutamine limitations, 587
Skeletal calcite in living scleractinian corals:

microboring fillings, not primary skeletal deposits, I. G. Macintyre et al., 701

SLATER, E. C. See QUAGLIARIELLO, E., et al. Slavin, S., et al.: Long-term survival of skin allografts in mice treated with fractionated

a heritable anomaly, 496

altografts in mice treated with fractionated total lymphoid irradiation, 1252
Smith, B. A. See Carr, M. H., et al.
Smith, B. H. See Schmitt, F. O., et al.
Smith, D. W. E. See Litt, M.
Smith, H. H. See Jones, C. W., et al.
Smith, J. C., Jr., et al.: Elevated plasma zinc:

Smith, J. E. See Hingtgen, J. N., et al. Smith, M. E. See Kramer, M. L., et al. Smith, R. L., et al.: Nitrogen fixation in grasses inoculated with Spirillum lipo-

ferum, 1003 Snodgrass, W. R. See Nelson, S. D., et al. J. A. See Lamar, R. E., et al.

Snowfall observations from natural-draft cooling tower plumes, M. L. Kramer et al.,

Snyder, G. W. See Soffen, G. A Snyderman, R. See Boucek, M. M.

Sobelman, M., et al.: Brown pelican reproduction (letters), 96

Soderblom, L. A. See Carr, M. H., et al. Soffen, G. A., and C. W. Snyder: The first Vi-king mission to Mars, 759

Solar neutrinos: proposal for a new test, M. S.

Freedman et al., 1117 Soodak, M. See Neary, J. T., et al. Sovietov, Y. K. See Schopf, J. W., and Y. K. Sovietov

Specificity of in vitro binding of primate type C viral RNA and the homologous viral p12

core protein, A. Sen and G. J. Todaro, 326 Spencer, N. W. See Nier, A. O., et al. Spitzer, C. R. See Shorthill, R. W., et al. Spongy bones in prehistoric America, M. Y. El-Najiar and A. L. Robertson, Jr., 141 Sprott, R. L. See Eleftheriou, B. E.

Squires, K. C., et al.: The effect of stimulus sequence on the waveform of the cortical event-related potential, 1142
Squires, N. K. See Squires, K. C., et al.

Staal, G. B., et al.: Juvenile hormone and pest control, 1032

Stark, A. E.: Hardy-Weinberg law: asymptotic approach to a generalized form, 1141

Statham, C. N., et al.: Bioconcentration of xenobiotics in trout bile: a proposed monitoring aid for some waterborne chemicals,

Statistics and rare phenomena (letters), D. H. Boucher et al., 634 Stebbings, R. F.: High Rydberg atoms: new-

comers to the atomic physics scene, 537 Steffey, P. C. See Hudson, H. T., et al. Stein, J. See Wright, H. E., Jr., et al.

Stencel, R., et al.: Astronomy and cosmology at Angkor Wat, 281

at Angkor wat, 201 Stevens, C. M. See Freedman, M. S., et al. Stewart, G. S. See Hadley, D. M., et al. Stidd, B. M. See Stidd, L. L. O. Stidd, L. L. O., and B. M. Stidd: Paracytic

(syndetocheilic) stomata in carboniferous

seed ferns, 156
Stockdale, F. E. See Brevet, A., et al.
Stocking, M. See Witkin, H. A., et al.
Stolz, A., et al.; Earth rotation measured by lunar laser ranging, 997

Stone, H. See Acton, E. M. Streptozotocin-induced pancreatic insulitis: new model of diabetes mellitus, A. A. Like and A. A. Rossini, 415

Strober, S. See Slavin, S., et al. Structured water or pumps? (letters), R. Dam-

adian et al., 528 Struxness, E. G. See Auerbach, S. I., et al. Study of trace fossils, The, R. w. FREY (Ed.), book review by R. G. Johnson, 223

Subjective measurement of high-order aberrations of the eye, B. Howland and H. C. Howland, 580

Suckling in newborn rats: eliminated by nipple lavage, reinstated by pup saliva, M. H. Teicher and E. M. Blass, 422

SUGDEN, D. E., and B. S. JOHN, Glaciers and landscape, book review of, 879

Supporting society journals (editorial), P. H. Abelson and R. V. Ormes, 9
Surface of Mars, The: the view from the Viking I lander, T. A. Mutch et al., 791
Susceptibility of mice to audiogenic seizures

is increased by handling their dams during gestation, S. L. Beck and D. L. Gavin, 427 Sustained tolerance to a specific effect of eth-

anol on posttetanic potentiation in Aplysia, M. E. Traynor et al., 510 Sweetman, B. J. See Ellis, E. F., et al. Symbiosis between the earth and mankind, R.

Dubos, 459

TALBOT, N. B., Raising children in modern America: what parents and society should

be doing for their children, book review of, TALBOT, N. B. (Ed.), Raising children in modern America: problems and prospective solutions, book review of, 310

Tam, J. C. L. See Hsia, J. C., et al. TAMARU, K., and M. ICHIKAWA, Catalysis by electron donor-acceptor complexes, book review of, 880
Tamers, M. A.: Total synthesis benzene and

its derivatives as major gasoline extenders,

Tanaka, S. See Reyss, J. L., et al. Tandy, M. See Bogart, J. P. Tartof, K. D. See Loeb, L. A. Task Force of the Presidential Advisory

Group on Anticipated Advances in Science and Technology: The Science Court experi-

ment: an interim report, 653
Taylor, G. R. See Mutch, T. A., et al.
Tectonic aspects of the Guatemala earthquake of 4 February 1976, G. Plafker, 1201 Teicher, M. H., and E. M. Blass: Suckling in newborn rats: eliminated by nipple lavage,

reinstated by pup saliva, 422
Teng, E. L., et al.: Handedness in a Chinese population: biological, social, and pathological factors, 1148

Terasaki, P. I., et al.: Multiple sclerosis and high incidence of a B lymphocyte antigen.

Terborgh, J. See Diamond, J. M., et al.
Thermal polyamino acids: synthesis at less
than 100°C, D. L. Rohlfing, 68
Thomas, W. A.: Scientists and lawyers ex-

plore weather modification at AAAS-ABA conference (AAAS), 473

Thompson, J. E.: book review of Molecular aspects of membrane phenomena, 757

Thromboxanes: selective biosynthesis and distinct biological properties, P. Needleman et al., 163

Thyrotropin releasing hormone: development of inactivation system during maturation of

the rat, J. T. Neary et al., 403 Tidball, M. E., and V. Kistiakowsky: Bac-calaureate origins of American scientists and scholars, 646

Tidball, R. R. See Johnson, C. L., et al.
Tillman, J. E. See Hess, S. L., et al.
Timbrell, J. A. See Nelson, S. D., et al.
Time-resolved spectroscopy of hemoglobin and its complexes with subpicosecond opti-

cal pulses, C. V. Shank et al., 50 Timney, B. N., and D. W. Muir: Orientation anisotropy: incidence and magnitude in Caucasian and Chinese subjects, 699

Ting, A. See Terasaki, P. I., et al. Tingey, W. M. See Pillemer, E. A TM: meditation or sleep? (letters), R. K. Wal-

lace et al., 718
Todaro, G. J. See Sen, A.
Tolson, R. H. See Michael, W. H., Jr., et

al. Total synthesis benzene and its derivatives as

major gasoline extenders, M. A. Tamers,

Toulmin, P., III. See Clark, B. C., et al. Toward a new partnership (editorial), W. D. McElroy, 1199
Towe, K. M. See Macintyre, I. B., et al.

Toxicological testing dilemma (letter), I. Muul

et al., 834 Trager, W., and J. B. Jensen: Human malaria parasites in continuous culture, 673 Trajectory of the Mount St. Augustine 1976

eruption ash cloud, A. B. Meinel et al., 420 Transplanted neural tissue develops con-

nections with host rat brain, R. D. Lund and S. D. Hauschka, 582 Traynor, M. E., et al.: Sustained tolerance to a specific effect of ethanol on posttetanic po-

tentiation in Aplysia, 510 Trends in comparative endocrinology, E. J. W. BARRINGTON (Ed.), book review by J. Dent, Trophic regulation of nerve sprouting, J. Diamond et al., 371 TUAN, S. F. See DOBSON, P. N., JR., et al.

Turner, C. See Diamond, J., et al. Turner, C. G., II: Dental evidence on the ori-

gins of the Ainu and Japanese, 911 Tyler, G. L., et al.: Radar characteristics of Viking 1 landing sites, 812 Tyler, M. E. See Smith, R. L., et al.

TZAGOLOFF, A. (Ed.), Membrane biogenesis, book review of, 994 Tzeng, M.-C. See Finkelstein, A., et al.

U

ULAM, S. M., Adventures of a mathematician, book review of, 567

Understanding mathematical proofs: conceptual barriers (letter), P. R. Chernoff, 276 Universities and national research policy (edi-

torial), D. C. Bok, 955 Updike, S. J., et al.: Asparaginase entrapped in red blood cells: action and survival,

Uptake and continued metabolic activity of Azotobacter within fungal protoplasts, K. L. Giles and H. Whitehead, 1125

Urquhart, D. L. See Kooyman, G. L., et al. Uyemura, D. G. See Lehman, I. R.

Valid climatological data from historical sources by content analysis, D. W. Moodie

and A. J. W. Catchpole, 51
Van Winkle, W. B.: Calcium release from skeletal muscle sarcoplasmic reticulum: site of action of dantrolene sodium?. Vasopressin and oxytocin are depleted from rat hypothalamic nuclei after oral hypertonic saline, J. M. George, 146 Veverka, J. See Carr, M. H., et al.

Viking lander location and spin axis of Mars: determination from radio tracking data, W. H. Michael, Jr., et al., 803

Viking landing sites, The: selection and cer-tification, H. Masursky and N. L. Crabill,

Viking: Mars atmospheric water vapor mapping experiment-preliminary report of re-

sults, C. B. Farmer et al., 776 Viking 1 (editorial), P. H. Abelson, 723 Vila, J. See Hoffman, R., et al.

Vision in fishes, M. A. ALI (Ed.), book review by R. G. Northcutt, 225

Visual discrimination impaired by cutting temporal lobe connections, J. A. Horel and L.

J. Misantone, 336 Volcanic dust in deep-sea sediments: relationship of microfeatures to explosivity estimates, T. C. Huang and N. D. Watkins,

Waage, J. K., and G. G. Montgomery: Crvptoses choloepi: a coprophagous moth that lives on a sloth, 157

Wade, N. (News and Comment): asbestos and National Academy of Sciences committee, 661: Carter as scientist or engineer. 462; environmental research, 1103; recombinant DNA, 215, 468; Soviet state and Kronid Lyubarsky, 863; U.S.S.R. exchange rejected, 864

Wakamiya, R. T. See Updike, S. J., et al.
Wakamiya, B. H. See Jegasothy, B. V., et al.
Walker, B. S. See Hudson, H. T., et al.
Walker, D. A.: Yearly seismic energy release: world totals versus ridge system totals, 886 Wallace, P. (Research News): animal behavior. 989

Wallace, R. K., et al.: TM: meditation or sleep? (letters), 718

Wallace, S. L. See Ertel, N. H., et al. Walsh, J. (News and Comment): British science policy, 132: cosmetic standards and pesticides, 744: Entomological Society of America, 658, 746: France and nuclear power, 305; history's quietest inquiry, 1100; National Science Foundation directorship to become vacant, 558; nuclear exports and proliferation, 387; R & D and economic growu., 35, 465 growth, 1101; Stever and science adviser,

and C. Holden (News and Comment): Stever gets delayed nod, 465 Walzer, S. See Boucher, D. H., et al. Warrenburg, S. See Wallace, R. K., et al.

waster, P. G. (Ed.), Cholinergic mechanisms, book review of, 226
Wasserman, L. R. See Hoffman, R., et al.
Wassersug, R. J.: book review of The hot-blooded dinosaurs, 44

Watanabe, M. See Diab, I. M., et al. Watkins, N. D. See Huang, T. C

Wei, E., and Loh, H.: Physical dependence on opiate-like peptides, 1262 Weight, F. F., and S. D. Erulkar: Modulation of synaptic transmitter release by repetitive postsynaptic action potentials, 1023

Weinstein, I. B., et al.: Benzo[a]pyrene diol epoxides as intermediates in nucleic acid binding in vitro and in vivo, 592
Weintraub, H., and M. Groudine: Chromo-

somal subunits in active genes have an altered conformation, 848 Weizenbaum, J. See Dyson, F. J., and J. Wei-

zenbaum

Wellings, S. R. See Rosier, R. P., et al.
Wellman, J. B. See Carr, M. H., et al.
Wendorf, F., et al.: The prehistory of the
Egyptian Sahara, 103

Weseloh, R. M.: Dufour's gland: source of sex pheromone in a hymenopterous parasitoid, 695

Westman, W. E.: Doomsday expectations (letter), 720
Whaley, K., and S. Ruddy: Modulation of C3b hemolytic activity by a plasma protein distinct from C3b inactivator, 1011 Whitcomb, R. F. See Diamond, J. M., et al.

White, C .: book review of Persons at high risk

of cancer, 397
White, R. H., and S. L. Miller: Inositol isomers: occurrence in marine sediments, 885 Whitehead, H. See Giles, K. L. WHITTAKER, R. H. See LIETH, H. Wickens, C. See Squires, K. C., et al. WILEY, W. R. See KABACK, H. E., et al. WILLEY, W. R. See KABACK, H. E., et al. Williams, B. A. See Satinoff, E., et al. Williams, J. G. See Stolz, A., et al. Willis, R. C. See Skaper, S. D., et al. Wilson, A. J. See Hansen, D. J., et al. Wiltschko, R. See Emlen, S. T., et al. Wiltschko, W. See Emlen, S. T., et al. Windsor, D. A. See Hudson, H. T., et al. Witelson, S. F.: Sex and the single hemi-

sphere: specialization of the right hemisphere for spatial processing, 425

sphere for spatial processing, 425
Witkin, H. A., et al.: Criminality in XYY and
XXY men, 547
Wolman, A.: Ecologic dilemmas, 740
Woodard, G. See Muul, I., et al.
Woodbury, J. W. See Damadian, R., et al.
Woodson, P. B. J. See Traynor, M. E., et al.
Wrensch, D. L. See Potter, D. A., et al.
Wright, H. E., Jr., et al.: Glacial surges and
flood legends, 1268

X-Z

X-rays from coalescing atoms, W. E. Meyerhof, 839

Yang, F. J. F. See Giddings, J. C., et al. Yang, K. See Teng, E. L., et al.

Yearly seismic energy release: world totals versus ridge system totals, D. A. Walker,

Yellowstone: seismic evidence for a chemical mantle plume, D. M. Hadley et al., 1237 Yip, C. C. See Rosenbloom, A. L., et al. Yokoyama, Y. See Reyss, J. L., et al. YORK, H. F., The advisors, book review of,

668 Yu. W.-S. See Powell, J. R., et al. Zahler, R.: Errors in mathematical proofs (let-

ter), 98
Zalusky, R. See Hoffman, R., et al.
Zanjani, E. D. See Hoffman, R., et al.
Zaret, T. M.: book review of The Nile, 1114
Zeller, J. A. See Smith, J. C., Jr., et al.
Zimmerman, H. E.: book review of Excited
states in organic chemistry, 670
Zukin, R. S., and D. E. Koshland, Jr.:
Mg²+, Ca²-dependent adenosine triphosphatase as receptor for divalent cations in
bacterial sensing 405

bacterial sensing, 405

SCIENCE

Index to Volume 194 October–December 1976

Editorial Board

ALFRED BROWN
JAMES F. CROW
WARD GOODENOUGH
CLIFFORD GROBSTEIN
HERBERT S. GUTOWSKY
N. BRUCE HANNAY
DONALD KENNEDY
HANS LANDSBERG

NEAL E. MILLER
EDWARD NEY
FRANK PRESS
FRANK W. PUTNAM
MAXINE F. SINGER
ARTHUR M. SQUIRES
RAYMOND H. THOMPSON

Editorial Staff

WILLIAM D. CAREY
Publisher

HANS NUSSBAUM Business Manager

PHILIP H. ABELSON Editor

EARL J. SCHERAGO, Advertising Director

American Association for the Advancement of Science

1515 Massachusetts Avenue, NW, Washington, D.C. 20005

Printed in Richmond, Virginia, by William Byrd Press

Copyright 1976 by the American Association for the Advancement of Science

| Issue No. | Date | Pages | Issue No. | Date | Pages |
|-----------|-------------|---------|-----------|-------------|-----------|
| 4260 | 1 October | 1-116 | 4267 | 19 November | 773-880 |
| 4261 | 8 October | 117-232 | 4268 | 26 November | 881-988 |
| 4262 | 15 October | 233-364 | 4269 | 3 December | 989-1096 |
| 4263 | 22 October | 365-472 | 4270 | 10 December | 1097-1212 |
| 4264 | 29 October | 473-556 | 4271 | 17 December | 1213-1368 |
| 4265 | 5 November | 557-656 | 4272 | 24 December | 1369-1456 |
| 4266 | 12 November | 657-772 | | | |

The names of authors of books reviewed are in SMALL CAPITALS.

AAAS project on Native Americans in science (AAAS), R. Green and S. M. Malcom,

AAAS Southwestern and Rocky Mountain Division—how a regional division operates (AAAS), L. M. Shields and M. G. Anderson, 1407

Aaronson, S. A. See Devare, S. G., et al.
Abelson, P. H. (editorials): Communicating with the publics, 565; Curtailing federal growth, 1379; Mr. Carter's inheritance, 999; National paralysis on energy, 261; A new window on our planet, 15; Oil and the world's future, 681; A report from the research community, 481; Unesco's tarnished image, 897

Abnormal visual resolution in the Siamese cat, R. Blake and D. N. Antoinetti, 109

Acid precipitation in the northeastern United States: pH and acidity, J. N. Galloway et al., 722

Acid precipitation: strong and weak acids, G. E. Likens *et al.*, 643

Activating factor for the iron protein of nitrogenase from *Rhodospirillum rubrum*, P. W. Ludden and R. H. Burris, 424

Activation of histone gene transcription by nonhistone chromosomal phosphoproteins. L. J. Kleinsmith and G. S. Stein, 428

Adachi, K., and T. H. Ingalls: Ovum aging and pH imbalance as a cause of chromosom al anomalies in the haraster, 946 Addleman, R. See Hamilton, J. A., et al. Adelman, L. See Hammond, K. R.

β-Adrenergic receptor involvement in 6-hydroxydopamine-induced supersensitivity in rat cerebral cortex, J. R. Sporn et al., 624

AFZELIUS, B. A. See BACCETTI, B. Agosin, M., et al.: Cytochrome P-450 and drug metabolism in Trypanosoma cruzi: effects of phenobarbital, 195

A'HEARN, M. See DONN, B., et al. Ahmadjian, V.: book review of Lichenology.

Aiello, E. See Stefano, G. B., et al.

Air bags, safety, and Big Brother (letters), W. F. Wegst, Jr., et al., 994
Albritton, D. L. See Fehsenfeld, F. C., et al.

Alexander, M.: book review of Symbiotic nitrogen fixation in plants, 418 Allison, T., and D. V. Cicchetti: Sleep in

mammals: ecological and constitutional correlates. 732

ALLOWAY, T. See PLINER, P., et al. Altenbach, J. S. See Geluso, K. N., et al. Altruism: methodological and definitional issues (letters), V. J. Konečni and H. W. Power, 562, erratum, 865
Alvares, A. P. See Pantuck, E. J., et al.
Ames, B. N., et al.: Mutagens and carcino-

gens (letter), 132

Amianthoid change: orientation of normal collagen fibrils during aging, D. W. L. Hukins et al., 622

Amnesia gradient, The: inadequate as evidence for a memory consolidation process, T. L. DeVietti and B. R. Kirkpatrick, 438 Anderson, D. L., et al., The Viking seismic

experiment, 1318

Anderson, D. M. See Biemann, K., et al., 72 Anderson, J. A. See White, W. H., et al. ANDERSON, J. D., JR., Gasdynamic lasers, book review of, 56

Anderson, K. E. See Pantuck, E. J., et al. Anderson, M. G. See Shields, L. M.

Andrews, F. C.: Colligative properties of simple solutions, 567

Animal behavior model for studying the actions of LSD and related hallucinogens. An, B. L. Jacobs et al., 741

Animal welfare and scientific research (letters), L. R. Aronson et al., 784 Antibacterial synergism: a proposal for chemotherapeutic potentiation between trimethoprim and sulfamethoxazole, M. Poe.

Antiserum to brain gangliosides produces recurrent epileptiform activity, S. E. Karpiak

Antitumor drug interactions: additional data (letters), S. Waxman et al., 1112
Antoinetti, D. N. See Blake, R.

Appearance of vegetation in ultraviolet light: absorbing flowers, reflecting backgrounds, M. W. Frohlich, 839

Argyle, M.: book review of Nonverbal communication of aggression, 1046

ARGYLE, M., and M. COOK, Gaze and mutual gaze, book review of, 54

Argyris, T. S.: book review of Chalones, 718
ARMITAGE, J. G. M., and I. E. FARQUHAR (Eds.), The helium liquids, book review of,

Arnold, A. P. See Nottebohm, F Aronoff, S.: book review of Intercellular com-

munication in plants, 176 Aronson, L. R., et al.: Animal welfare and scientific research (letters), 784

Aronson, M. See Horowitz, P., et al. Arrigoni, O., et al.: Ascorbic acid as a factor controlling the development of cyanide-insensitive respiration, 332

Arrigoni-Liso, R. See Arrigoni, O., et al. Arvidson, R. E. See Hargraves, R. B., et al., page 1303. See also Mutch, T. A., et al., pages 87 and 1277

Ascorbic acid as a factor controlling the development of cyanide-insensitive respiration, O. Arrigoni et al., 332 Aspergillus oryzae (NRRL strain 1988): a clar-

ification, D. I. Fennell and R. E. Morse,

Association Affairs: AAAS news, 49, 597, 1032; annual meeting, 513, 599, 827, 1039, 1266, 1407; financial statement, 1406 ATHAY, R. G., The solar chromosphere and corona, book review of, 1048

Atmosphere of Mars, The: detection of kryp-

ton and xenon, T. Owen et al., 1293 Atmosphere of Mars near the surface, The: isotope ratios and upper limits on noble

gases, K. Biemann et al., 76 Atomic and molecular physics and the interstellar matter, R. BALIAN et al. (Eds.), book

review by J. H. Black, 717 Attraction of minicomputers, The (letter), I. Shavitt and F. Tobin, 890 Aumann, H. H., and G. S. Orton: Jupiter's

spectrum between 12 and 24 micrometers,

Autoregulation and function of a repressor in bacteriophage lambda, M. Ptashne et al.,

Autrup, H. See Harris, C. C., et al. Average proteins and the genetic code, C.

Gautier et al., 642 Averbach, B. L.: book review of Grain boundary structure and properties, 55 Avrin, P. See Mutch, T. A., et al., page 1277

В

BACCETTI. B., and B. A. AFZELIUS, The biology of the sperm cell, book review of, 833 Bacillus thuringiensis enzyme-digested delta endotoxin: effect on cultured insect cells. W. Murphy et al., 954

Backman, K. See Ptashne, M., et al.
Baird, A. K. See Clark, B. C., et al. See also
Toulmin, P., III, et al.
Baird, A. K., et al.: Mineralogic and petrolog-

ic implications of Viking geochemical results from Mars: interim report, 1288

Balasubramanian, R. See Srinivasan, R., et

BALIAN, R., et al. (Eds.), Atomic and molecular physics and the interstellar matter, book review of, 717 Bank of mammalian DNA fragments, A (let-

ter), F. H. Bergmann, 1226 Barnes, A. T., et al.: Deep-sea macroplanktonic sea cucumbers: suspended sediment feeders captured from deep submergence vehicle, 1083

of EPA report (letter), 998
Barron, W. S. See Kelly, D. H., et al.
Barrett, L. A. See Harris, C. C., et al.
Basinger, S., et al.: Photoreceptor shedding is initiated by light in the frog retina, 1074 Bat mortality: pesticide poisoning and migra tory stress, K. N. Geluso et al., 184

Bauer, W. R. See Lippard, S. J., et al. Bé, A. W. H. See Hecht, A. D., et al. and J. C. Duplessy: Subtropical convergence fluctuations and quaternary cli-

mates in the middle latitudes of the Indian Ocean, 419 Beall, P. T. See Brownstein, K. R., et al. Becker, B., et al.: HLA antigens and cortico-

steroid response, 1427 Becker, D. A., and J. D. Hoffman: Recycled

oil (letter), 478 Bennett, M. V. L. See Spira, M. E., et al. Benthic boundary layer, The, I. N. MC CAVE (Ed.), book review by W. H. Berger, 417 Bentley, D.: book review of Insect flight, 611

Berdahl, B. J. See Klein, H. P., et al. Berger, W. H.: book review of The benthic

boundary layer, 417 Bergmann, F. H.: A bank of mammalian

DNA fragments (letter), 1226 Berkowitz, B. A., et al.: Nitrous oxide "analgesia": resemblance to opiate action, 967 BERNE, B. J., and R. PECORA, Dynamic light scattering, book review of, 1155

Berry, J. A. See Mooney, H. A., et al. Bertino, J. R. See Waxman, S., et al. Bertzer, P. R. See Doyle, L. J., et al. Beyond economic man, H. LEIBENSTEIN, book review by L. J. Lau, 715

Bhatia, C. R., and R. Rabson: Bioenergetic considerations in cereal breeding for protein improvement, 1418

Biemann, K. See Owen, T., et al.

Biemann, K., et al.: The atmosphere of Mars near the surface: isotope ratios and upper limits on noble gases, 76 Biemann, K., et al.: Search for organic and

volatile inorganic compounds in two surface samples from the Chryse Plantia region of Mars, 72

of Mars, 12 Bilges, W. D. See Wainwright, S. A., et al. Biller, J. E. See Biemann, K., et al., page 72. See also Owen, T., et al., page 1293 Binder, A. B. See Mutch, T. A., et al., pages

87 and 1277

Biochemical high-risk paradigm, The: behav-ioral and familial correlates of low platelet monoamine oxidase activity, M. S. Buchs baum et al., 339

Bioenergetic considerations in cereal breed-

ing for protein improvement, C. R. Bhatia and R. Rabson, 1418 Biogeography and ecology in the Canary Is-lands, G. KUNKEL (Ed.), book review by G. Israelson, 610

Biology of the sperm cell, The, B. BACCETTI and B. A. AFZELIUS, book review by R. Yanagimachi, 833

Biosynthesis and function of gangliosides, P. H. Fishman and R. O. Brady, 906 Bixby, J. L. See Woolf, N. K., et al.

Bjorken, J. D. (Research News): 1976 Nobel

prize in physics, 825 Black, J. H.: book review of Atomic and molecular physics and the interstellar matter,

Black magnetic spherule fallout in the eastern Gulf of Mexico, L. J. Doyle et al., 1157 Blackshear, W. T. See Michael, W. H., Jr., et

Blake, R., and D. N. Antoinetti: Abnormal visual resolution in the Siamese cat, 109

Blasius, K. R. See Cutts, J. A., et al. Blind fish can school, A. T. J. Pitcher et al., 963

Blood-brain barrier in physiology and medi-cine, S. I. RAPOPORT, book review by W. Oldendorf, 518

Bloom, F., et al.: Endorphins: profound behavioral effects in rats suggest new etiological factors in mental illness, 630

BLUMBERG, S. A., and G. OWENS, Energy and conflict, book review of, 514
Blumenthal, D. L. See White, W. H., et al.

Boak, T. I. S., III See Michael, W. H., Jr., et

Boffey, P. M. (News and Comment): American science and its plight, 409; arms control impact statements, 36; Carter inherits science advisory apparatus, 1257; Du Pont Company and cancer incidence, 1252; science court, 167; "Science for Citizens 306; swine flu, 590; vaccine imbroglio, 1021

BOHART, R. M., and A. S. MENKE, Sphecid wasps of the world, book review of, 312 Bond, P. J. See Lippard, S. J., et al.

Bone compressive strength: the influence of density and strain rate. D. R. Carter and Hayes, 1174

Bormann, F. H. See Likens, G. E., et al. Bounds on "bound water": transverse nuclear magnetic resonance relaxation in barnacle muscle, K. R. Foster et al., 324

Bovine lymphosarcoma: development of a radioimmunologic technique for detection of the etiologic agent. S. G. Devare et al..

Boylen, C. W., and R. B. Sheldon: Submergent macrophytes: growth under winter ice cover, 841

Boynton, R. M. See Kelly, D. H., et al. Bradshaw, W. G. See Stricker, E. M., et al. Brady, R. O. See Fishman, P. H. Braunwald, E. See Maclean, D., et al. Brenkle, J. P. See Michael, W. H., Jr., et al. Briggs, D. L. See Kevan, P. G., et al. Briggs, G. A. See Cutts, J. A., et al. Brohn, F. H. See Clarkson, A. B., Jr.

Brooker, G., et al.: Gammaflow: a completely automated radioimmunoassay system, 270 Brothers, D. J.: book review of Sphecide wasps of the world, 312

BROWN, D. H., et al. (Eds.), Lichenology,

book review of, 418
Brown, F. S. See Klein, H. P., et al.
Brown, R. D., III, See Koenig, S. H., et al.
Brown, R. M., Jr. See Mueller, S. C., et al.

Brown, s. c. See OLESON, A. Brownstein, K. R., et al.: Relaxation time versus water content: linear or nonlinear?. 213

Bruckner, H. See Waxman, S., et al. Brunelli, M., et al.: Synaptic facilitation and behavioral sensitization in Aplysia: possible role of serotonin and cyclic AMP, 1178

Brunner, K. (Research News): The 1976 Nobel prize in economics. 594

Buchsbaum, M. S., et al.: The biochemical high-risk paradigm: behavioral and familial correlates of low platelet monoamine oxidase activity, 339

BUCHWALD, V. F., Handbook of iron meteorites, book review of, 313

Buium, I. See Katzenelson, E., et al. Burney, C. M. See Sieburth, J. M., et al. Burris, R. H. See Ludden, P. W.

Burt, D. R. See Meltzer, H. Y., et al. Burwell, R. L., Jr.: book review of The physical basis for heterogeneous catalysis, 1411 Busch, G. E., and P. M. Rentzepis: Picosec

ond chemistry, 276 Busse, W. W., and J. Sosman: Histamine inhibition of neutrophil lysosomal enzyme re-

lease: an H2 histamine receptor response,

Cain, D. L. See Michael, W. H., Jr., et al. Calabrese, G. See Arrigoni, O., et al.

Calcinogenic factor in Solanum malacoxylon: evidence that it is 1,25-dihydroxyvitamin D₃-glycoside, R. H. Wasserman *et al.*, 853

Calcium and secretion: distinction between two pools of glucose-sensitive calcium in pancreatic islets, B. Hellman et al., 1421

Calcium carbonate production, coral reef growth, and sea level change, S. V. Smith and D. W. Kinsey. 937
CAMERON, A. G. W. See FIELD, G. B.

Cannabinoid induced behavioral convulsions in rabbits, P. Martin and P. Consroe, 965

Capdevila, J. See Agosin, M., et al. Capranica, R. R. See Woolf, N. K., et al. Carbon monoxide: effects on oxygenation of the fetus in utero, L. D. Longo, 523 Carey, W. D. (editorials): On working with

the Soviets, 789; A question of checks and balances, 1233

Carle, G. C. See Klein, H. P., et al. Carlquist, S.: book review of The seeds of dicotyledons, 56

Carlson, D. A., et al.: Mirex in the environment: its degradation to Kepone and related compounds, 939

Carlston, C. E. See Mutch, T. A., et al., page

Caron, D. A. See Sieburth, J. M., et al.
Carpenter, F. L., and R. E. MacMillen:
Threshold model of feeding territoriality and test with a Hawaiian honeycreeper, 639 Carr, M. H. See Cutts, J. A., et al.

Carrying behavior in humans: analysis of sex differences. D. A. Jenni and M. A. Jenni,

Carter, D. R., and W. C. Hayes: Bone compressive strength: the influence of density and strain rate, 1174

Carter, L. J. (News and Comment): Carter transition scramble, 1139; Jimmy Carter, 501; nuclear initiatives, 811; science advisers for states, 923; toxic substances, 40

"Case" of Sir Cyril Burt, The (letter), I. Phillips, 137

Casper, B. M.: Technology policy and democracv. 29

Castellucci, V. See Brunelli, M., et al. and E. R. Kandel: Presynaptic facilitation as a mechanism for behavioral sensitization in Aplysia, 1176

Castro, A. J. See Clark, B. C., Catapane, E. See Stefano, G. B., et al. Cell biology of brain, W. E. WATSON, book re-view by W. M. Cowan, 1154

Cell line identification (letters), G. E. Moore et al., 480

Cellulosic microfibrils: nascent stages of synthesis in a higher plant cell, S. C. Mueller et al 949

Central nervous regulation of body temper-ature during sleep, S. F. Glotzbach and H. C. Heller, 537

Centrifugal fibers to the eye in a nonavian vertebrate: source revealed by horseradish per-oxidase studies, M. Halpern *et al.*, 1185 C-fragment of β-lipotropin, The: an endoge-

nous neuroleptic or antipsychotogen?, Y. F. Jacquet and N. Marks, 632 CHADWICK, G. A., and D. A. SMITH (Eds.),

Grain boundary structure and properties book review of, 55 Chalones, J. C. HOUCK (Ed.), book review by

T. S. Argyris, 718 Chamberlain, T. E. See Hess, S. L., et al.

Chander, S. See Devare, S. G., et al. Chang, J. K. See Pert, C. B., et al. Chao, E. C. T.: Mineral-produced high-pressure striae and clay polish: key evidence for nonballistic transport of ejecta from Ries

Chase, S. C., Jr. See Kieffer, H. H., et al., page 1341

Chen, A. See Tsai, J. S. Cheung, P. See Mendelson, R. A. Childress, J. J. See Barnes, A. T., et al.

Cho, H. Y., et al.: Revertants of human cells transformed by murine sarcoma virus, 951 Choline administration: activation of tyrosine

hydroxylase in dopaminergic neurons of rat brain, I. H. Ulus and R. J. Wurtman, 1060 Cholinergic stimulation of the rat hypothala mus: effects on liver glycogen synthesis, T. Shimazu et al., 535

Christensen, P. R. See Kieffer, H. H., et al., 1346

Christian, R. P. See Baird, A. K., et al. Christiansen, B., and T. H. Clack, Jr.: A western perspective on energy: a plea for rational energy planning, 578 Christie, W. H. See Gentry, R. V., et al.

Chromosomal proteins and their role in the regulation of gene expression, G. s. STEIN and L. J. KLEINSMITH (Eds.), book review by V. Littau, 518 Chu, B.: book review of Dynamic light scatter-

ing, 1155

Cicchetti, D. V. See Allison, T. Cicerone, C. M.: Cones survive rods in the light-damaged eye of the albino rat, 1183 Clampitt, B. H., and F. E. Kiviat: Energy recovery from saline water by means of electrochemical cells, 719

Clack, T. H., Jr. See Christiansen, B. Clark, B. C. See Baird, A. K., et al. See also Toulmin, P., III, et al.

Clark, B. C., et al.: Inorganic analyses of martian surface samples at the Viking landing sites, 1283

Clarkson, A. B., Jr., and F. H. Brohn: Trypanosomiasis: an approach to chemotherapy by the inhibition of carbohydrate catabolism, 204

Clawson, M., and J. F. Morton: "Petroleum plants" (letters), 678

CLELAND, C. E., Cultural change and continuity, book review of, 832

Clinical judgment: psychological research and medical practice, A. S. Elstein, 696 Clonal evolution of tumor cell populations,

The, P. C. Nowell, 23 Clouse, A. O. See Hamilton, J. A., et al.

Coal research: progress and problems (letters), G. A. Mills et al., 374Cobb, J. C.: Public involvement in scientific

decision-making (letter), 674 Coe, M. D.: book review of Fábrica San José and middle formative society in the Valley of Oaxaca, 832 Cohen, D. J.; book review of The wild boy of

Aveyron, 311
Cole, H. L. See Hess, S. L., et al.
Colligative properties of simple solutions, F.

C. Andrews, 567 Collinson, D. W. See Hargraves, R. B., et al.,

pages 84 and 1303

Colman, D. R. See Halpern, M., et al.
Comet West and the scattering function of
cometary dust, E. P. Ney and K. M. Merrill, 1051 Communicating with the publics (editorial).

P. H. Abelson, 565

Composition and structure of the martian up-per atmosphere: analysis of results from Viking, M. B. McElroy et al., 1295 Computers: minis and maxis (letter), T. Pink

erton and L. Travis, 257 Computing in the liberal arts college, J. M.

Nevison, 396 Cones survive rods in the light-damaged eye of the albino rat, C. M. Cicerone, 1183 Conklin, H. C., and M. Pinther: Pseudoscopic

illusion (letter), 374

Conney, A. H. See Pantuck, E. J., et al. Connor, R. See Harris, C. C., et al. Consroe, P. See Martin, P.

CONVERSE, P. E., and W. L. RODGERS, The quality of American life, book review of, 52

COOK, M. See ARGYLE, M. Cooper, M. L. See Aronson, L. R., et al. Cooper, N. R. See Moore, G. E., et al.

Cooperative computation of stereo disparity, D. Marr and T. Poggio, 283

Cordes, E. H. See Hamilton, J. A., et al. CORNER, E. J. H., The seeds of dicotyledons, book review of, 56

Coursey, R. D. See Buchsbaum, M. S., et al.

Covers: Adam and Eve sleeping in the Garden of Eden (12 Nov.); central heating plant near Gothenburg, Sweden (3 Dec.); computer enhanced martian sunset (17 Dec); computer-generated radioimmunoassay curves (15 Oct.); Denver in 1859 (5 Nov.); electro-chemical growth (8 Oct.); Japanese quail newly hatched (26 Nov.); Moreno Glacier at Lago Argentino (10 Dec.); mustache bat (29 Oct.); nuclear magnetic resonance image of a tumor (24 Dec.); Orbulina universa d'Orbigny (22 Oct.); Potamogeton robbinsii bed (19 Nov.); Viking I orbiter mosaic (1 Oct)

Cowan, W. M.: book review of Cell biology of brain, 1154

Crabill, N. L. See Masursky, H. Craig, H.: Dating the deluge (letter), 894 Creese, I. See Meltzer, H. Y., et al. Cristy, S. S. See Gentry, R. V., et al. Croat, J. J., et al.: Rare-earth manganites: sur-

face-segregated platinum increases catalyt-

ic activity, 318 Crowe, K. M.: book review of Nuclear and particle physics at intermediate energies,

Cruickshank, A. M.: Gordon Research Conferences: winter program, 1977, 454 Cruikshank, P., et al.: Pluto: evidence for

methane nost, 835

Culliton, B. J. (News and Comment): birth control, 921; Gerald R. Ford, 501; gonorrhea resistant to antibiotics, 1395; Haemmerli case dropped, 588; Health Professional Educational Assistance Act, 700; Legionnaire's fever postmortem, 1025; National Academy of Sciences and open hearings. Rauscher resigns from National Cancer Institute, 38; "right-to-die" law passes, 588 Cultural activity associated with prehistoric

mammoth butchering and processing, G. C.

Frison, 728

Cultural change and continuity, C. E. CLE-LAND, book review by M. L. Fowler, 832 Cunningham, T. J.: Early eye removal produces excessive bilateral branching in the rat: application of cobalt filling method, 857 URREY, J. D. See WAINWRIGHT, S. A., et al

Curtailing federal growth (editorial), P. H.

Abelson, 1379
Cutchins, E. C. See Cho, H. Y., et al.
Cutts, J. A., et al.: North polar region of Mars: imaging results from Viking 2, 1329
Cytochrome P-450 and drug metabolism in Trypanosoma cruzi: effects of phenobarbital, M. Agosin et al., 195

D

DAGG, A. I., and J. B. FOSTER, The giraffe, book review of, 933

[D-Ala²]-Met-enkephalinamide: a long-lasting synthetic pentapeptide analgesic, C. B. Pert et al., 330

Damadian, R., et al.: Field focusing nuclear

magnetic resonance (FONAR): visualization

of a tumor in a live animal, 1430

Darnell, J. E. See Sehgal, P. B., et al.

Dasbach, J. M.: Educators review Chautauqua courses (AAAS), 598

Dating the deluge (letter), H. Craig, 894 Davies, D. W. See Farmer, C. B., et al. Davis, P. G. See Sieburth, J. M., et al. Davison, J.: Hydra hymanae: regulation of

the life cycle by time and temperature, 618 Dawe, C. J. See Sakakura, T., et al.

Death and dying policy: a bold exchange (AAAS), N. C. Joyce, 49
DeCamp, M. See Poland, A., et al.

deCharms, R.: book review of Values in edu-

cation and society, 931

Deep-sea macroplanktonic sea cucumbers: suspended sediment feeders captured from deep submergence vehicle, A. T. Barnes et al., 1083

Deep-sea research by manned submersibles. J. R. Heirtzler and J. F. Grassle, 294

DeFries, J. C. See Jensen, A. R., et al. Deininger, P. L., and C. W. Schmid: Thermal stability of human DNA and chimpanzee

DNA heteroduplexes, 846 de Jongh, H. J.: book review of Respiration of

amphibious vertebrates, 313 Deland, M. C. See Pak, W. L., et al.

Demographic evolution of human populations, The, R. H. WARD and K. M. WEISS (Eds.), book review by B. Dyke, 1046

Denef, C., et al.: A specific population of gonadotrophs purified from immature female rat pituitary, 848 Denman, D. See Pimentel, D., et al.

Dependability of wind energy generators with short-term energy storage, B. Sørensen,

Depletion of brain catecholamines: failure of ocular dominance shift after monocular occlusion in kittens, T. Kasamatsu and J. D. Pettigrew, 206

Derepressed alloantigen on transplacentally induced lung tumor coded for by H-2 linked gene, W. J. Martin et al. 532

Derman, E. See Sehgal, P. B., et al. DeSombre, E. R. See Johnson, E. S., et al. Devare, S. G., et al.: Bovine lymphosarcoma: development of a radioimmunologic technique for detection of the etiologic agent.

DeVietti, T. L., and B. R. Kirkpatrick: The amnesia gradient: inadequate as evidence

for a memory consolidation process, 438 DeWitt, J. R. See Kesner, R. P., et al. Diaz, A. V. See Biemann, K., et al., page 72 5.6-Dichloro-1\(\beta\)-p-ribofuranosylbenzimidazole inhibits initiation of nuclear heterogeneous RNA chains in HeLa cells, P. B.

Sehgal et al., 431 DiFranco, D. See Dodwell, P. C., et al. Dilcher, D. L.: book review of Paleoecology of terrestrial plants, 517 Dingerkus, G., and W. M. Howell: Karyotyp-

ic analysis and evidence of tetraploidy in the North American paddlefish, 842 Discharge of aminoacyl-viral RNA by a factor

from interferon-treated cells, I. Sela et al.,

Disproportionate tonotopic representation for processing CF-FM sonar signals in the mustache bat auditory cortex, N. Suga and P. H.-S. Jen. 542

Dissolved organic matter and heterotrophic microneuston in the surface microlayers of the North Atlantic. J. M. Sieburth et al., 1415

Dodwell, P. C., et al.: Responses of infants to visually presented objects, 209 DONN, B., et al. (Eds.), The study of comets,

book review of, 515
Donn, W. L. See Ninkovich, D.
Donnelly, R. J.: book review of The helium liquids, 176 Dopamine receptors and average clinical

doses, H. Y. Meltzer et al., 545 Dopaminergic agents: influence on serotonin

in the molluscan nervous system. G. B. Stefano et al., 539

Doyle, J. A.: book review of The evolutionary

significance of the exine, 1410
Doyle, L. J., et al.: Black magnetic spherule fallout in the eastern Gulf of Mexico, 1157 DRAUGLIS, E., and R. I. JAFFE (Eds.), The physical basis for heterogeneous catalysis,

book review of, 1411

DRENNAN, R. D., Fábrica San José and middle formative society in the Valley of Oaxaca, book review of, 832

Drilling, tankers, and oil spills on the Atlantic outer continental shelf, W. B. Travers and P. R. Luney, 791

Drugs from the sea, G. D. Ruggieri, 491 Duennebier, F. K. See Anderson, D. L., et al. Dunham, E. W. See Mutch, T. A., et al., page

Duplessy, J.-C. See Bé, A. W. H. Dusty universe, The, G. B. FIELD and A. G. W CAMERON (Eds.), book review by T. P.

Snow. Jr., 609 Dutton, R. G. See Hess, S. L., et al., page 78 Dyke, B.: book review of The demographic evolution of human populations, 1046 Dynamic light scattering, B. J. BERNE and R. PECORA, book review by B. Chu, 1155 Dyson-Hudson, R. See Pimentel, D., et al.

E

Early eye removal produces excessive bilateral branching in the rat: application of cobalt filling method, T. J. Cunningham, 857

Early history of science in Spanish America, M. Roche, 806

Early meteorological results from the Viking 2 lander, S. L. Hess et al., 1352 Earthquake light in focus (letter), C. F. Rich-

ter, 259

Eckhardt, H. See Wegst, W. F., Jr., et al. Ecologic and paleoclimatic implications of morphologic variation of Orbulina universa in the Indian Ocean, A. D. Hecht et al., 422 Economou, J. S. See Shin, H. S., et al. Edgerton, E. S. See Galloway, J. N., et al.

Editorials: Communicating with the publics. 565; Curtailing federal growth. 1379; Mr. Carter's inheritance. 999; National paralysis on energy. 261; A new window on our planet. 15; Oil and the world's future. 681; On working with the Soviets, 789; A question of checks and balances, 1233; A report from the research community, 481; Social science in the White House, 1119; Species preservation, 383; Unesco's tarnished image, 897; University tenure "problem," 137

Educators review Chautauqua courses (AAAS), J. M. Dasbach, 598

Edwards, J. S.: book review of A functional anatomy of invertebrates, 612 Effect of charcoal-broiled beef on phenacetin metabolism in man, E. J. Pantuck et al.,

Efficient energy use and well-being: the Swedish example, L. Schipper and A. J. Lichtenberg. 1001

Eisner, T., and E. O. Wilson: Sergei Kovalev: a colleague in trouble (letter), 133

Eldred, N. R. See Aronson, L. R., et al. Electrochemical growth of highly conducting inorganic complexes, J. S. Miller, 189

Electron plasma oscillations associated with type III radio bursts, D. A. Gurnett and R. R. Anderson, 1159 Electrotonic coupling: effective sign reversal

by inhibitory neurons, M. E. Spira et al.,

Elemental analysis of biological specimens in air with a proton microprobe, P. Horowitz et al., 1162 Elstein, A. S.: Clinical judgment: psychologi-

cal research and medical practice, 696 Emery, J. F. See Gentry, R. V., et al. ENCRENAZ, P. See BALIAN, R., et al.

Endocrine-dependent rat mammary tumor regression: use of a gonadotropin releasing hormone analog, E. S. Johnson et al., 329

Endorphins: profound behavioral effects in rats suggest new etiological factors in men-tal illness, F. Bloom et al., 630 Energy and conflict, s. A. BLUMBERG and G.

OWENS, book review by H. F. York, 514 Energy recovery from saline water by means of electrochemical cells, B. H. Clampitt and F. E. Kiviat, 719

Enigma of radiation effects in *Drosophila*. The, E. Novitski, 1387

Enkephalin-induced depression of single neurons in brain areas with opiate receptors antagonism by naloxone, R. C. A. Frederickson and F. H. Norris, 440

Environmental setting for plant domestication in the Near East, H. E. Wright, Jr., 385
Environs of Viking lander 2, The, R. W. Shorthill et al., 1309

Episodic strain accumulation in Southern Cali-

fornia, W. Thatcher, 691
Ergotism and the Salem village witch trials,
N. P. Spanos and J. Gottlieb, 1390

Erickson, E. H. See Kevan, P. G., et al.

Errata: for cover note [193, 1181 (1976)], 412; for W. R. Havender (1 Oct., page 9), 865; for V. J. Konečni and H. W. Power (5 Nov., page 563), 865; for News and Com-ment [193, 1106 (1976)], 412; for News and Comment (15 Oct., page 299), 412; for News and Comment (19 Nov., page 814), 1402 Estes, J. R. See Kevan, P. G., et al.

Etzioni, A.: Social science in the White House (editorial), 1119

Evans, H. E .: book review of Evolution of in-

stinct, 612 Evans, P. H. See Clark, B. C., et al. Evidence of morphological and physiological transformation of mammalian cells by strong magnetic fields, G. I. Malinin et al.,

Evolution of instinct, K. IWATA, book review

by H. E. Evans, 612

Evolutionary significance of the exine, The, 1. K. FERGUSON and J. MULLER (Eds.), book review by J. A. Doyle, 1410
Ewing, D., and E. L. Powers: Irradiation of bacterial spores in water: three classes of

oxygen-dependent damage, 1049

Explosive Cenozoic volcanism and climatic implications, D. Ninkovich and W. L. Donn. 899

Extended helical conformation newly observed in protein folding, R. Srinivasan et al., 720

Faber, D. S. See Korn, H

Fábrica San José and middle formative so-ciety in the Valley of Oaxaca, R. D. DREN-NAN, book review by M. D. Coe, 832

Factors governing tropospheric mean temperature, R. E. Newell and B. C. Weare, 1413 Fallon, A. M. See Truman, J. W., et al. Fallon, P. See Hochberg, J. Famiglietti, E. V., Jr., and H. Kolb: Structur-

al basis for on- and off-center responses in retinal ganglion cells, 193 Farmer, C. B., et al.: Mars: northern summer

ice cap-water vapor observations from Viking 2, 1339

FARQUHAR, I. E. See ARMITAGE, J. G. M.

Fast, P. G. See Murphy, D. W., et al. Faust, D. L. See Pehek, J. O., et al. FEATHER, N.T., Values in education and so-ciety, book review of, 931

Federal funding of medical schools (letter), C.

Fehsenfeld, F. C., et al.: Stratospheric ion

chemistry and the 11-year variation in polar ozone, 544
Feldman, M. W. See Jensen, A. R., et al. Fennell, D. I., and R. E. Morse: Aspergillus oryzae (NRRL strain 1988): a clarification,

Ferguson, E. E. See Fehsenfeld, F. C., et al. Ferguson, H. B. See Kalat, J. W., et al. FERGUSON, I. K., and J. MULLER (Eds.), The evolutionary significance of the exine, book

review of, 1410

Ferrone, S. See Moore, G. E., et al. Field focusing nuclear magnetic resonance (FONAR): visualization of a tumor in a live animal, R. Damadian et al., 1430

FIELD, G. B., and A. G. W. CAMERON (Eds.), The dusty universe, book review of, 609 Filaroides hirthi: experimental transmission among beagle dogs through ingestion of first-stage larvae, J. R. Georgi, 735

Finck, A. D. See Berkowitz, B. A., et al.

Fine particles on Mars: observations with the

Viking 1 lander cameras, T. A. Mutch et

Fishbein, M. C. See Maclean, D., et al. Fishman, P. H., and R. O. Brady: Biosynthesis and function of gangliosides. 906

tch, W. M.: Is there selection against wobble in codon-anticodon pairing?, 1173 Fitzgerald, T. D.: Trail marking by larvae of

the eastern tent caterpillar, 961 Fjeldbo, G. See Michael, W. H., Jr., et al. Flory, D. See Biemann, K., et al., page 72

Fluorescent nectar, P. G. Kevan et al., 341 Flyger, V: "Pregnancy prevention" (letter),

Fogel, S. See Sena, E., et al. Fong, B. T. W. See Pert, C. B., et al.

Formation and transport of secondary air pollutants: ozone and aerosols in the St. Louis urban plume, W. H. White et al., 187

FOSTER, J. B. See DAGG, A. I. Foster, K. R., et al.: Bounds on "bound water": transverse nuclear magnetic resonance relaxation in barnacle muscle, 324 Fowler, M. L.: book review of Cultural

change and continuity, 832 Fox, M. W. See Aronson, L. R., et al.

Fox, P. L. See Mutch, T. A., et al., page 1277 Francke, U. See George, D. L.

Frankel, J. See George, D. L. Frankel, J. See Jensen, A. R., et al. Fray, P. J. See Koob, G. F., et al. Frederickson, R. C. A., and F. H. Norris: En-kephalin-induced depression of single neurons in brain areas with opiate receptorsantagonism by naloxone, 440 Fredriksson, K.: book review of Handbook of

iron meteorites, 313

Freeman, E. F.: Mammal teeth from the for-est marble (Middle Jurassic) of Oxfordshire, England, 1053
Freeman, K. B. See Thom, G., et al.

French, F. W., III. See Sieburth, J. M., et al. FRETTER, V., and A. GRAHAM, A functional anatomy of invertebrates, book review of.

Frison, G. C.: Cultural activity associated with prehistoric mammoth butchering and processing, 728

Frohlich, M. W.: Appearance of vegetation in ultraviolet light: absorbing flowers, reflecting backgrounds, 839

Frohliger, J. P. See Likens, G. E., et al. Functional anatomy of invetebrates. A. FRETTER and A. GRAHAM, book review by J. S. Edwards, 612

Fundamental aspects of metastasis, L. WEISS (Ed.), book review by D. B. Rifkin, 1154 Fungal spore, The, D. J. WEBER and W. M. HESS (Eds.), book review by H. O. Halvor-

G

GAGEL'GANS, A. I. See TURAKULOV, YA. KH., et al.

GAIDINA, G. A. See TURAKULOV, YA. KH., et

Galloway, J. N. See Likens, G. E., et al.
Galloway, J. N., et al.: Acid precipitation in
the northeastern United States: pH and acidity, 722

Gammaflow: a completely automated radioimmunoassay system, G. Brooker et al., 270 GANI, J. (Ed.), Perspectives in probability and statistics, book review of, 1272 Gans, C.: book review of Mechanical design

son, 718

in organisms, 933 Garland, W. A. See Pantuck, E. J., et al. Garroway, A. N. See Foster, K. R., et al. Gasdynamic lasers, J. D. ANDERSON, JR., book review by G. H. C. New, 56

Gautier, C., et al.: Average proteins and the genetic code, 642

Gay, N. C.: Spherules on shatter cone surfaces from the Vredefort structure, South Africa, 724

Gaze and mutual gaze, M. ARGYLE and M. COOK, book review by S. Weitz, 54 Geluso, K. N., et al.: Bat mortality: pesticide

poisoning and migratory stress, 184 Gene dose effect: regional mapping of human nucleoside phosphorylase on chromosome 14, D. L. George and U. Francke, 851

Genetic composition of a high-yielding influenza A virus recombinant: a vaccine strain against "swine" influenza, P. Palese et al., 334

Gentry, P. A. See Gentry, R. V., et al. Gentry, R. V., et al.: Radiohalos in coalified wood: new evidence relating to the time of uranium introduction and coalification, 315

George, D. L., and U. Francke: Gene dose effect: regional mapping of human nucleoside phosphorylase on chromosome 14, 851

Georgi, J. R.: Filaroides hirthi: experimental transmission among beagle dogs through ingestion of first-stage larvae, 735

Gern, W. A. See Norris, D. O. Giandomenico, C. M. See Poland, A., et al. Gilbert, J. J.: Sex-specific cannibalism in the

rotifer Asplanchna sieboldi, 730 Gillani, N. V. See White, W. J., et al.
Gipson, T. G. See Martin, W. J., et al.
Giraffe, The, A. I. DAGG and J. B. FOSTER,
book review by P. A. Jewell, 933
Glock, C. Y.: book review of The quality of

American life, 52 Glotzbach, S. F., and H. C. Heller: Central nervous regulation of body temperature dur-ing sleep, 537

Glover, E. See Poland, A., et al.
Glueck, C. J. See Hamilton, J. A., et al.
GOL'BER, L. M. See TURAKULOV, YA. KH., et al

Goldin, A. See Waxman, S., et al. Goldsmith, M. See Damadian, R., et al. Goldstein, R. B. See Michael, W. H., Jr., et

Gooding, J. L. See Baird, A. K., et al. Gorbman, A.: book review of Thyroid hor-mones, 177

Gordon Research Conferences: winter program, 1977, A. M. Cruickshank, 454 Gori, B. B.: Low-risk cigarettes: a pre-

scription, 1243 GOSLINE, J. M. See WAINWRIGHT, S. A., et al. Gottlieb, J. See Spanos, N. P.

Graf, L. See Karpiak, S. E., et al. GRAHAM, A. See FRETTER, V. Graham, J. See Thom, G., et al.

Grain boundary structure and properties, G. A. CHADWICK and D. A. SMITH (Eds.), book review by B. L. Averbach, 55

Grassle, J. F. See Heirtzler, J. R. Greeley, R. See Cutts, J. A., et al. Green, R., and S. M. Malcom: AAAS project

on Native Americans in science (AAAS). Greene, G. C. See Hess, S. L., et al., page 78 Greenhouse effects due to man-made per-

turbations of trace gases, W. C. Wang et Gregory, W. D. See Malinin, G. I., et al. Grenander, S. U. See Mutch, T. A., et al. page 1277

GRIFFIN, D. R., The question of animal aware-

ness, book review of, 930

Grimes, R. N.: The 1976 Nobel prize for chemistry (Research News), 709

Grobstein, C.: Recombinant DNA research: beyond the NIH guidelines, 1133

Grodzins, L. See Horowitz, P., et al. Grossberg, S. E. See Sela, I., et al. Grossi, M. D. See Michael, W. H., Jr., et al. Guillemin, R. See Bloom, F., et al. Guinness, E. A. See Mutch, T. A., et al.,

Gulati, J. See Palmer, L. G.

GUNNING, B. E. S., and A. W. ROBARDS (Eds.),

Intercellular communication in plants, book review of, 176 Gurnett, D. A., and R. R. Anderson: Electron

plasma oscillations associated with type III radio bursts, 1159

H

Halictine social evolution: the Australian enigma, G. Knerer and M. Schwarz, 445 HALLAM, A., Jurassic environments, book review of, 716

Halpern, M., et al.: Centrifugal fibers to the eye in a nonavian vertebrate: source revealed by horseradish peroxidase studies,

Halvorson, H. O.: book review of The fungal spore, 718

Hamilton J. A., et al.: High-field ¹³C NMR studies of certain normal and abnormal human plasma lipoproteins, 1424

Hammond, A. L. (News and Comment): Nuclear Regulatory Commission to increase inspection, 168. (Research News): coal research, 172; coal liquefaction plant, 712.

See also Mills. G. A., et al.

Hammond, K. R., and L. Adelman: Science, values, and human judgment, 389

Handbook of iron meteorites, V. F. BUCH-WALD, book review by K. Fredriksson, 313 Hänsch, T. W .: book review of Quantum elec-

tronics, 610
Hansen, J. E. See Wang, W. C., et al.
Harcombe, P. A., and P. L. Marks: Species preservation (editorial), 383

Harden, T. K. See Sporn, J. R., et al.
Hargraves, R. B., et al.: Viking magnetic
properties investigation: further results, 1303; Viking magnetic properties investigation: preliminary results, 84
Harner, M.: book review of War in ecological

perspective, 1270

Harrington, D. D. See Read, D. H., et al.

HARRINGTON, R. See DONN, B., et al. Harris, C. C., et al.: Interindividual variation in binding of benzo[a]pyrene to DNA in cultured human bronchi, 1067

Haussler, M. R. See Wasserman, R. H., et al. Hautekeete, E. See Denef, C., et al. Havender, W. R. See Jensen, A. R., et al., er-

ratum, 865 HAWKESWORTH, D. L. See BROWN, D. H., et al.

Hayden, M. L. See Shin, H. S., et al. Hayes, R. M. See Thom, G., et al. Hayes, W. C. See Carter, D. R. Hays, J. D., et al.: Variations in the earth's or-

bit: pacemaker of the ice ages, 1121 Hanzen, R. M.: Sanidine: predicted and ob-served monoclinic-to-triclinic reversible transformations at high pressure, 105

Hazlewood, C. F. See Brownstein, K. R., et

Hecht, A. D., et al.: Ecologic and paleoclimatic implications of morphologic variations of Orbulina universa in the Indian Ocean, 422

Heinen, H. D. See Layrisse, Z., et al. Heirtzler, J. R., and J. F. Grassle: Deep-sea research by manned submersibles, 294

Helium liquids, The, J. G. M. ARMITAGE and I E. FARQUHAR (Eds.), book review by R. J.

Donnelly, 176 Heller, H. C. See Glotzbach, S. F. Hellman, B., et al.: Calcium and secretion: distinction between two pools of glucosesensitive calcium in pancreatic islets, 1421

Henion, J. D. See Wasserman, R. H., et al. Henriksen, A. See Likens, G. E., et al. Henry, R. M. See Hess, S. L., et al., pages 78 and 1352

Heritability of IQ (letters), A. R. Jensen et al.,

Herschman, A.: Science and change: hopes

and dilemmas (AAAS), 599

Hess, S. L., et al.: Early meteorological results from the Viking 2 lander, 1352; Mars climatology from Viking 1 after 20 sols, 78 HESS, W. M. See WEBER, D. J. High concentration of GABA and high gluta-

mate decarboxylase activity in rat pancreatic islets and human insulinoma, Y. Okada et

High-field ¹³C NMR studies of certain normal and abnormal human plasma lipoproteins, J. A. Hamilton et al., 1424

High photosynthetic capacity of a winter annual in Death Valley, H. A. Mooney et al.,

Hill, H. Z.: Peer review: preventing "nepotism" (letter), 894

Hill, R. W., and J. H. Veghte: Jackrabbit ears: surface temperatures and vascular responses, 436

Hinkley, D.: book review of Perspectives in probability and statistics, 1272 Henahan, J. F. (News and Comment): Max

Planck Institute for Biophysical Chemistry,

Hinga, K. R. See Sieburth, J. M., et al. Hinman, E. E., and editors' reply: Mailing labels on Science covers (letters), 674

Hinsman, E. J. See Read, D. H., et al. Hirst, E.: Residential energy use alternatives: 1976 to 2000, 1247

Histamine inhibition of neutrophil lysosomal enzyme release: an H2 histamine receptor response, W. W. Busse and J. Sosman, 737

Histocompatibility system in the Warao Indians of Venezuela, The, Z. Layrisee et al.,

Histologic structures preserved for 21,300 years, M. R. Zimmerman and R. H. Tedford, 183

HLA antigens and corticosteroid response, B. Becker et al., 1427 Hobby, G. L. See Horowitz, N. H., et al. See

also Klein, H. P., et al. Hochberg, J., and P. Fallon: Perceptual analy-

sis of moving patterns, 1081 Hoffman, J. D. See Becker, D. A. Hoffman, R. See Basinger, S., et al.

Holden, C. (News and Comment): amphetamines and tighter controls, 1027; Clean Air Act revision a casualty, 406; the handi-capped and rehabilitation, 1399; Inter-national Conference on the Unity of Sciences, 1254; medical admission test mod-ernized, 817; mirex pesticide, 301; Nader and the psychologists, 707; scientific journal publishers and threatened postage hike, 502; Smithsonian Institution and a new

quarterly, 702; world population trends, 704 Holmquist, R. See Gautier, C., et al. Hopkins, T. L. See Doyle, L. J., et al. Hoppensteadt, F. C., and J. B. Keller: Synchronization of periodical cicada emergences, 335

Hormonal release of programmed behavior in silk moths: probable mediation by cyclic AMP, J. W. Truman, et al., 1432 Hormones, behavior, and psychopathology,

E. J. SACHAR (Ed.), book review by J. P. Tu-

Horne, R. A.: Scientists involved in environmental litigation (letter), 1377 Horowitz, N. H. See Klein, H. P., et al. Horowitz, N. H., et al.: The Viking carbon as

similation experiments: interim report, 1321 Horowitz. P., et al.: Elemental analysis of biological specimens in air with a proton micro-

probe, 1162 Houck, J. C. See Malinin, G. I., et al. HOUCK, J. C. (Ed.), Chalones, book review of,

Howarth, D. W. See Biemann, K., et al., page 76. See also Owen, T., et al., page 76. See also Owen, T., et al., Howell, W. M. See Dingerkus, G. Hsiao, K.-C. See Pantuck, E. J., et al., Hubbard, J. S. See Horowitz, N. H., et al.

See also Klein, H. P., et al. Huck, F. O. See Mutch, T. A., et al., pages 87

and 127 Huebert, B. J. See Likens, G. E., et al. Huebner, R. J. See Cho, H. Y., et al. HUGHES, G. M. (Ed.), Respiration of amphibi-

ous vertebrates, book review of, 313 Hukins, D. W. L., et al.: Amianthoid change: orientation of normal collagen fibrils during

aging, 622 Humayun, M. Z. See Ptashne, M., et al. Hunt, W. A. See Majchrowicz, E., et al. Husar, J. D. See White, W. H., et al. Husar, R. B. See White, W. H., et al.

Hutton, R. E. See Shorthill, R. W., et al., pages 91 and 1309

Hyaluronidase-induced reductions in myocardial infarct size, D. Maclean et al., 199

Hydra hymanae: regulation of the life cycle by time and temperature, J. Davison, 618

Hydroxymethyluracil in eukaryote DNA: a natural feature of the pyrrophyta (dinoflag-

ellates), P. M. M. Rae, 1062 25-Hydroxyvitamin D₃: autoradiographic evidence of sites of action in epiphyseal cartilage and bone, F. H. Wezeman, 1069

Hyman, L. S.: Utility accounting and energy policy (letter), 1226

ypoxanthine-guanine phosphoribosyltrans ferase mutant glioma cells: diminished monoamine oxidase activity, S. D. Skaper and J. E. Seegmiller, 1171

Image modulation in corona discharge photography, J. O. Pehek et al., 263

Imbrie, J. See Hays, J. D., et al. Immunotherapy of cancer with antibody, H. S. Shin et al., 327

Impurities in labeled diethylstilbestrol: identification of pseudodiethylstilbestrol, D. M. Tennent et al., 1059

Increased transport of Antarctic Bottom Water in the Vema Channel during the last ice age, M. T. Ledbetter and D. A. Johnson,

Infidelity of DNA synthesis in vitro: screening for potential metal mutagens or carcino

gens, M. A. Sirover and L. A. Loeb, 1434 Ingalls, T. H. See Adachi, K. Ingraham, E. W.: Lead time for assessing land use: a case study, 17

Inhibition by anions of human red cell carbonic anhydrase B: physiological and biochemical implications, S. H. Koenig et al., 745

Inorganic analyses of martian surface samples at the Viking landing sites, B. C. Clark et

al., 1283
Insect flight, R. C. RAINEY (Ed.), book review by D. Bentley, 611

Insect pheromone synthesis: new methodolo-

gy, J. A. Katzenellenbogen, 139 Intercellular communication in plants, B. E. S. GUNNING and A. W. ROBARDS (Eds.), book review by S. Aronoff, 176 Interindividual variation in binding of ben-

zo[a]pyrene to DNA in cultured human bronchi, C. C. Harris et al., 1067

Interplanetary encounters, E. J. ÖPIK, book review by G. W. Wetherill, 609
Irradiation of bacterial spores in water: three

classes of oxygen-dependent damage, D. Ewing and E. L. Powers, 1049

Is there selection against wobble in codon-anticodon pairing?, W. M. Fitch, 1173
Ishikawa, K. See Shimazu, T., et al.

Island biology illustrated by the land birds of Jamaica, D. LACK, book review by G. H. Orians, 1153

Isotopic composition of nitrogen: implications for the past history of Mars' atmosphere,

M. B. McElroy et al., 70

Isotopic composition of the martian atmosphere, A. O. Nier et al., 68

Israelson, G.: book review of Biogeography

and ecology in the Canary Islands, 610 Iversen, S. D. See Koob, G. F., et al. IWATA, K., Evolution of instinct, book review of, 612

J

Jackrabbit ears: surface temperatures and vas-cular responses, R. W. Hill and J. H.

Veghte, 436

JACKSON, W. See DONN, B., et al.

Jacobs, B. L., et al.: An animal behavior model for studying the actions of LSD and re-lated hallucinogens, 741 Jacquet, Y. F., and N. Marks: The C-frag-ment of β-lipotropin: en endogenous neuro-

leptic or antipsychotogen?, 632

JAFFEE, R. I. See DRAUGLIS, E. Jansson, M.: Phosphatases in lake water: characterization of enzymes from phytoplankton and zooplankton by gel filtration, 320

Jeffrey, A. See Ptashne, M., et al. Jen, P. H.-S. See Suga, N.

Jenden, D. J., et al.: Regulation of acetylcholine synthesis: does cytoplasmic acetyl-choline control high affinity choline up-take?, 635

Jenni, D. A., and M. A. Jenni: Carrying behavior in humans: analysis of sex differences, 859

Jenni, M. A. See Jenni, D. A.

Jensen, A. R., et al.: Heritability of IQ (let-

Jewell, P. A.: book review of The giraffe, 933 Johnson, D. A. See Ledbetter, M. T.

Johnson, D. B.: Ultragiant urban aerosol particles, 941

Johnson, E. S., et al.: Endocrine-dependent rat mammary tumor regression: use of a gonadotropin releasing hormone analog,

Johnson, N. M. See Likens, G. E., et al. Johnson, R. D. See Klein, H. P., et al. Johnson, K. M. See Sieburth, J. M., et al. Johnson, P. W. See Sieburth, J. M., et al. Johnson, R. J. See Shin, H. S., et al. JONES, E. B. G. (Ed.), Recent advances in

aquatic mycology, book review of, 833 Jones, K. L. See Mutch, T. A., et al., page 1277

Jope, R. S. See Jenden, D. J., et al. Joyce, N. C.: Death and dying policy: a bold

exchange (AAAS), 49

Jukes, T. H. See Gautier, C., et al.

Jupille, T. H., and J. A. Perry: Programmed multiple development in thin-layer chromatography, 288

Jupiter's spectrum between 12 and 24 micrometers, H. H. Aumann and G. S. Orton,

Jurassic environments, A. HALLAM, book review by T. J. M. Schopf, 716

K

Kahn, R. See Mutch, T. A., et al., page 1277 Kalat, J. W., et al.: Minimal brain dysfunction: dopamine depletion?, 450 Kandel, E. R. See Brunelli, M., et al. See also

Castellucci, V

KANDROR, V. I. See TURAKULOV, YA. KH., et al.

Kane, R. See Likens, G. E., et al Kantrowitz, A. See Kushner, L. M. Kappas, A. See Pantuck, E. J., et al.

Karpiak, S. E., et al.: Antiserum to brain gangliosides produces recurrent epileptoform activity, 735

Karyotypic analysis and evidence of tetra-ploidy in the North American paddlefish, Polyodon spathula, G. Dingerkus and W.

M. Howell, 842 Kasamatsu, T., and J. D. Pettigrew: Depletion of brain catecholamines: failure of ocular dominance shift after monocular occlu-

sion in kittens, 206

Katz, S. See Croat, J. J., et al. Katzenellenbogen, J. A.: Insect pheromone synthesis: new methodology, 139

Katzenelson, E., et al.: Risk of commu-nicable disease infection associated with wastewater irrigation in agricultural settlements, 944 Kaulicke, P. See Pires-Ferreira, J. W., et al.

Kay, S. R. See Levy, D. L., et al. Kedar, E. Y., and J. Otterman: No deser-

tification mechanism, 747 Keenan, T. W. See Read, D. H., et al. Keil, K. See Baird, A. K., et al. See also Clark, B. C., et al. See also Toulmin, P.,

Keller, J. B. See Hoppensteadt, F. C. Kelliher, W. C. See Clark, B. C., et al. Kelly, D. H., et al.: Primate flicker sensitivity: psychophysics and electrophysiology, 1077

Kelly, G. M. See Michael, W. H., Jr., et al.

Kende, A. S. See Poland, A., et al.
Kesner, R. P., et al.: Time-dependent disruption of morphine tolerance by electroconvulsive shock and frontal cortical stimulation, 1079

Kevan, P. G., et al.: Fluorescent nectar, 341 Kieffer, H. H.: Soil and surface temperatures

at the Viking landing sites, 1344
Kieffer, H. H., et al.: Martian north pole summer temperatures: dirty water ice, 1341;
Temperatures of the martian surface and atmosphere: Viking observation of diurnal and geometric variations, 1346

Kilbourne, E. D. See Palese, P., et al. Kinsey, D. W. See Smith, S. V. Kirk, D. B. See Seiff, A.

Kirkpatrick, B. R. See DeVietti, T. L.

Kiviat, F. E. See Clampitt, B. H

Klein, H. P., et al.: The Viking biological investigation: preliminary results, 99
Kleinsmith, L. J., and G. S. Stein: Activation

of histone gene transcription by nonhistone chromosomal phosphoproteins, 428

KLEINSMITH, L. J. See STEIN, G. S. Knerer, G., and M. Schwarz: Halictine social evolution: the Australian enigma, 445

Knight, D. P. See Hukins, D. W. L., et al. Knight, T. C. D. See Anderson, D. L., et al. Knuth, D. E.: Mathematics and computer sci-

ence: coping with finiteness, 1235 Koenig, S. H., et al.: Inhibition by anions of human red cell carbonic anhydrase B: physiological and biochemical implications, 745 Kolata, G. B. (Research News); atherosclerotic plaques, 592; coronary bypass surgery, 1263; heart disease and its detection, 1029; heart disease and its epidemiology,

509 Kolb, H. See Famiglietti, E. V., Jr. Konečni, V. J., and H. W. Power: Altruism: methodological and definitional issues (letters), 562; erratum, 865

Kong, T. Y. See McElroy, M. B., et al., page 1295

Konyha, K. D. See Carlson, D. A., et al. Koob, G. F., et al.: Tail-pinch stimulation: sufficient motivation for learning, 637

Korn, H., and D. S. Faber: Vertebrate central nervous system: same neurons mediate both electrical and chemical inhibitions, 1166

Kostrzewa, R. M. See Kalat, J. W., et al. Kouba, R. F. See Tennent, D. M., et al.

Koutcher, J. See Damadian, R., et al. Kovach, R. L. See Anderson, D. L., et al. Kraig, R. P., and C. Nicholson: Sodium liquid ion exchanger microelectrode used to measure large extracellular sodium transients,

KRAMES, L. See PLINER, P., et al. KRASILOV, V. A., Paleoecology of terrestrial plants, book review of, 517

Krauskopf, K. B.: Radioactive waste disposal (letter), 134

Kripke, D. F.: Serotonin depression, 214 KUNKEL, G. (Ed.), Biogeography and ecology in the Canary Islands, book review of, 610 Kushner, L. M., and A. Kantrowitz: The Science Court experiment (letters), 6 Kyler, H. J. See Pehek, J. O., et al.

Lacis, A. A. See Wang, W. C., et al. LACK, D., Island biology illustrated by the land birds of Jamaica, book review of, 1153 Ladd, W. See Horowitz, P., et al.

LaFleur, A. L. See Biemann, K., et al., page 76. See also Owen, T., et al.

Land degradation: effects on food and energy resources, D. Pimentel et al., 149 LANE. H.. The wild boy of Aveyron, book review of, 311

LaPorte, D. D. See Farmer, C. B., et al. Latham, G. V. See Anderson, D. L., et al. Lau, L. J.: book review of Beyond economic man, 715

LaVail, M. M.: Rod outer segment disk shedding in rat retina: relationship to cyclic light-

ing, 1071 Lavoie, D. M. See Sieburth, J. M., et al.

Layrisse, M. See Layrisse, Z., et al.
Layrisse, Z., et al.: The histocompatibility stem in the Warao Indians of Venezuela, 1135

Lazarevicz, A. R. See Anderson, D. L., et al. Lead time for assessing land use: a case study, E. W. Ingraham, 17

Lechene, C. See Horowitz, P., et al. Ledbetter, M. T., and D. A. Johnson: Increased transport of Antarctic Bottom Water in the Vema Channel during the last ice age, 837

Lederberg, J. See Klein, H. P., et al. Lee, B. G.: Mission operations strategy for Viking, 59

Lee, B. S. See Mills, G. A., et al.

LEIBENSTEIN, H., Beyond economic man, book review of, 715 Leovy, C. B. See Hess, S. L., et al., pages 78

and 1352

LEQUEUX, J. See BALIAN, R., et al.
Levin, G. V. See Klein, H. P., et al.
and P. A. Straat: Viking labeled re-

lease biology experiment: interim results, 1322

Levinthal, E. C. See Mutch, T. A., et al., pages 87 and 1277

Levy, D. L., et al.: Wheat gluten-schizophrenia findings, 448 Levy, J., and M. Reid: Variations in writing

posture and cerebral organization, 337 ewontin, R. C. See Jensen, A. R., et al.

Lewontin, R. C. See Jensen, A. R., et al. Lichenology, D. H. BROWN et al. (Eds.), book review by V. Ahmadjian, 418 Lichtenberg, A. J. See Schipper, L. Lieber, C. S. See Shaw, S., et al. Liebes, S., Jr. See Mutch, T. A., et al., pages 87 and 1277. See also Shorthill, R. W., et al., page 91

Life events, stress, and illness, J. G. Rabkin and E. L. Struening, 1013
Likens, G. E. See Galloway, J. N., et al.

Likens, G. E., et al.: Acid precipitation: strong and weak acids, 643

LINDBERG, D. C., Theories of vision from al-

Kindi to Kepler, book review of, 1047
Ling, N. See Bloom, F., et al.
Lippard, S. J., et al.: Stereochemical requirements for intercalation of platinum complexes into double-stranded DNA's, 726

Lipson, L.: Technical issues and the adversary process (letter), 890 Littau, V.: book review of Chromosomal pro-teins and their role in the regulation of gene

expression, 518

Loeb, L. A. See Sirover, M. A. Longo, L. D.: Carbon monoxide: effects on

oxygenation of the fetus in utero, 523 Lott, L. See Hecht, A. D., et al. Low-risk cigarettes: a prescription, G. B. Gori, 1243 Ludden, P. W., and R. H. Burris: Activating

factor for the iron protein of nitrogenase from Rhodospirillum rubrum, 424

Luney, P. R. See Travers, W. B.

M

Maclean, D., et al.: Hyaluronidase-induced reductions in myocardial infarct size, 199
MacMillen, R. E. See Carpenter, F. L.
MacNeil, P. E. See Michael, W. H., Jr. et

Mailing labels: hot air, patience, and other suggestions (letters), G. Thom et al., 1116 Mailing labels on *Science* covers (*letters*), E. E. Hinman and editors' reply, 674
Majchrowicz, E., *et al.*: Suppression by 1,3-butanediol of the ethanol withdrawal syn-

drome in rats, 1181

Malcom, S. M. See Green, R. Malinin, G. I., et al.: Evidence of morphological and physiological transformation of mammalian cells by strong magnetic fields,

Mallophaga, Trinoton anserinum, as a cyclodevelopmental vector for a heartworm parasite of waterfowl, A, W. S. Seegar *et al.*, 739

Mammal teeth from the forest marble (Middle Jurassic) of Oxfordshire, England, E. F. Freeman, 1053

Man-made radionuclides and sedimentation in the Hudson River estuary, H. J. Simpson et al., 179

Mann, A.: book review of Paleoanthropology and Primate functional morphology and

evolution, 516

Maren, T. H. See Koenig, S. H., et al.
Marks, N. See Jacquet, Y. F.
Marks, P. L. See Harcombe, P. A.
Maroko, P. R. See Maclean, D., et al.
Marr, D., and T. Poggio: Cooperative compu-

tation of stereo disparity, 283

Mars climatology from Viking 1 after 20 sols, S. L. Hess et al., 78

Mars dynamics, atmospheric and surface properties: determination from Viking tracking data, W. H. Michael, Jr. et al., 1337

Mars: northern summer ice cap—water vapor observations from Viking 2, C. B. Farmer

et al., 1339

Mars: a standard crater curve and possible new time scale, G. Neukum and D. U. Wise, 1381

Marsh, R. F. See Melnick, J. L. Marshall, G. P. See Carlson, D. A., et al. Martian north pole summer temperatures: dirty water ice, H. H. Kieffer et al., 1341 Martin, P., and P. Consroe: Cannabinoid in-

duced behavioral convulsions in rabbits.

Martin, S. E. See Martin, W. J., et al. Martin, T. Z. See Kieffer, H. H., et al., pages 1341 and 1346

Martin, W. J., et al.: Derepressed alloantigen on transplacentally induced lung tumor

coded for by H-2 linked gene, 532 Martino, J. P. See Wegst, W. F., Jr., et al. Marx, J. L. (Research News): atherosclerosis and cholesterol, 77; cardiovascular disease, 511; heart attack and afterward, 1147; hypertension, 821. See Kolata, G. B. Mason, W. A .: book review of The question of

animal awareness, 930

Mass media intern program accepting applica-

tions (AAAS), G. Vermilye, 51

Masursky, H. See Cutts, J. A., et al.

_____, and N. L. Crabill: Search for the Viking 2 landing site, 62

Mathematics and computer science: coping with finiteness. D. E. Knuth, 1235 Matsushita, H. See Shimazu, T., et al. Matthes, M. See Basinger, S., et al. Maugh, T. H., II (Research News): artificial

genes, 44; cancer chemotherapy, 310; carbon compounds and prediction of unusual structures, 413; drug prescribing and birth defects, 926; ozone layer and aerosols, 170; plants and gasoline, 46; pyrolysis-spectrom-

etry, 1403

Maurer, R. See Ptashne, M., et al.
May, J. G. See Kalat, J. W., et al.
May, R. M.: book review of Structure and classification of paleocommunities, 1410 Mayo, A. P. See Michael, W. H., Jr., et al. McCain, T. A. See Wasserman, R. H., et al. McCann, J. See Ames, B. N., et al.

MC CAVE, I. N. (Ed.), The benthic boundary layer, book review of, 417

McDonald, R. H., Jr. See Stricker, E. M., et

McDowell, E. M. See Harris, C. C., et al McElroy, M. B. See Nier, A. O., page 1298.

See also Nier, A. O., et al., page 68
McElroy, M. B., et al.: Composition and structure of the martian upper atmosphere: analysis of results from Viking, 1295; Isotopic composition of nitrogen: implications for the past history of Mars' atmosphere, 70

McLean, J. H. See Kalat, J. W., et al. McMillan, J. P. See Turek, F. W., et al Mechanical design in organisms, s. A. WAINWRIGHT et al., book review by C. Gans, 933

Mehler, A. H. See Sela, I., et al Melatonin: effects on the circadian locomotor rhythm of sparrows, F. W. Turek et al.,

Melnick, J. L., and R. F. Marsh: The 1976 Nobel prize for physiology or medicine (Research News), 927

Meltzer, H. Y., et al.: Dopamine receptors

and average clinical doses, 545
Menaker, M. See Turek, F. W., et al.
Mendelson, R. A., and P. Cheung: Muscle
crossbridges: absence of direct effect of calcium on movement away from the thick fila-

MENKE, A. S. See BOHART, R. M. Merriam, G. See Horowitz, P., et al.

Merrill, K. M. See Nev. E. P. Mesenchyme-dependent morphogenesis and epithelium-specific cytodifferentiation in

mouse mammary gland, T. Sakakura et al.,

Metz, W. D. (News and Comment): Argonne accelerator to be closed, 38; solar energy and illumination, 1404; solar politics, 1256; thermonuclear fusion and Soviet work, 166. (Research News): energy research, 307; Viking mission, 819, 924

Meyer, B. See Ptashne, M., et al. Michael, W. H., Jr., et al.: Mars dynamics, atmospheric and surface properties: determination from Viking tracking data, 1337
Miller, F.D.: book review of The study of com-

Miller, J. S.: Electrochemical growth of highly conducting inorganic complexes, 189 Miller, W. F. See Anderson, D. L., et al. Mills, B. G., and F. R. Singer: Nuclear in-

clusions in Paget's disease of bone, 201 Mills, G. A., et al.: Coal research: progress and problems (letters), 374

Miner, E. C. See Kieffer, H. H. et al., pages 1341 and 1346

Mineral-produced high-pressure striae and clay polish: key evidence for nonballistic transport of ejecta from Ries crater, E. C. T. Chao, 615

Mineralogic and petrologic implications of Viking geochemical results from Mars: interim report, A. K. Baird et al., 1288

Minimal brain dysfunction: dopamine deple-tion?, J. W. Kalat et al., 450 Minkoff, L. See Damadian, R., et al. MIRAKHMEDOV, A. K. See TURAKULOV, YA.

KH., et al. Mirex in the environment: its degradation to Kepone and related compounds, D. A. Carlson et al., 939

Mission operations strategy for Viking, B. G. Lee, 59

Mr. Carter's inheritance (editorial), P. H.

Abelson, 999
Mitchell, J. L. See Hess, S. L., et al., pages 78 and 1352 Mo, T. See Wang, W. C., et al.

Moise, H. See Gautier, C., et al. Molinoff, P. B. See Sporn, J. R., et al. Molland, A. G.: book review of Theories of vi-

sion from al-Kindi to Kepler, 1047 Molloy, G. R. See Sehgal, P. B., et al. Mooney, H. A., et al.: High photosynthetic capacity of a winter annual in Death Valley,

Moore, G. E., et al.: Cell line identification (letters), 480 Moore, H. J., II. See Shorthill, R. W., et al.,

pages 91 and 1309

lorris, E. C. See Mutch, T. A., et al., pages 87 and 1277 Morelli, L. See Malinin, G. I., et al. Morris, E.

Morrison, D. See Cruikshank, D. P., et al. Morse, R. E. See Fennell, D. I. Morton, J. F. See Clawson, M. Morton, N. E. See Jensen, A. R., et al.

Mueller, S. C., et al.: Cellulosic microfibrils: nascent stages of synthesis in a higher plant cell. 949

Muir, D. See Dodwell, P. C., et al. MULLER, J. See FERGUSON, I. K. MUMMA, M. See DONN, B., et al

Murphy, D. L. See Buchsbaum, M. S., et al. Murphy, D. W., et al.: Bacillus thuringiensis enzyme-digested delta endotoxin: effect on cultured insect cells, 954

Murphy, T. J. See Likens, G. E., et al. Muscle crossbridges: absence of direct effect of calcium on movement away from the thick filaments, R. A. Mendelson and P. Cheung, 190

Mutagens and carcinogens (letter), B. B. Ames et al., 132

Mutch, T. A., et al.: Fine particles on Mars: observations with the Viking 1 lander cameras, 87; The surface of Mars: the view from the Viking 2 lander, 1277 Nakamura, Y. See A derson, D. L., et al. Naquira, C. See Agosar, M., et al. National paralysis on energy (editorial), P. H.

Abelson, 261 Neglected literature, A (letter), J. L. Olsen,

Jr., 894 Networks of amateurs for science (letter), J. Whitman, 1228

Neukum, G., and D. U. Wise: Mars: a standard crater curve and possible new time scale, 1381

Neuronal-visceral GM₁ gangliosidosis in a dog with β -galactosidase deficiency, D. H. Read et al., 442 Nevison, J. M.: Computing in the liberal arts

college, 396 New, G. H. C.: book review of Gasdynamic

lasers, 56 New window on our planet, A (editorial), P. H. Abelson, 15

New York Bight project (letter), H. M. Stanford and J. S. O'Connor, 678

Newell, R. E., and B. C. Weare: Factors gov-

erning tropospheric mean temperature, 1413

News and Comment: American science and its plight, 409; amphetamines and tighter nis pignt, 409; amphetamines and tigner controls, 1027; ammal rights, 162; Argențina and repression of scientists, 1397; Argonne accelerator to be closed, 38; arms control impact statements, 36; Biological Sciences Curriculum Study, 42; birth control, 921; Carter inherits science advisory apparatus, Carter transition scramble, 1139; Clean Air Act revision a casualty, 406; Congress and the budget process in an election year, 405; Congress and election impacts, 812; Currie charged with favoritism, 507; Du Pont Company and cancer incidence, 1252; Gerald R. Ford, 501; Glomar Explorer and Russian submarine, 1142; gonorrhea and antibiotic resistance, 1395; Haemmerli case dropped, 588; handicapped civil rights in higher education, 1399; Hayflick's vaccine cells, 41; Health Professional Educational Assistance Act, 700; International Conference on the Unity of Sciences, 1254; International Council of Scientific Unions, 587; IQ and heredity, 916; Jimmy Carter, 501; Kistiakowsky's A Scientist in the White House, 1144; Legionnaire's fever White House, 1144; Legionnaire's fever postmortem, 1025; Lewis of the National Bureau of Standards accused of plagiarism, 1401; Max Planck Institute for Biophysical Chemistry, 410; medical admission test modernized, 817; mirex pesticide, 301; Nader and the psychologists, 707; National Academy of Sciences and open hearings, 813; National Medal of Science awards, 504; National Research Council cuts three committees, 706; National Science Board meetings to be public, 39; nuclear iniatives, 811; nuclear power and European doubts, 164; Nuclear Regulatory Commission to increase inspection, 168; Palau and superport debated, 919; psychosurgery, 299; Rauscher resigns from National Cancer Institute, 38; recombinate DNA 202, 205. 38; recombinant DNA, 303, tute. "right-to-die" law passes, 588; science advisers for states, 923; science court, 167; "Science for Citizens," 306; scientific journal publishers and postage hike, 502; Senate class of 1976 and Ph.D.'s, 1145; Sergei Kovalev, 585, 1260; Smithsonian Institution and new quarterly, 702; solar energy at Energy Research and Development Agen-cy, 1256; Soviet civil defense, 1141; Soviet nuclear test, 168; space and the future, 39; swine flu, 590; Tennessee Valley Authority today, 814 (erratum, 1402); thermonuclear fusion and Soviet work, 166; toxic substances, 40; vaccine imbroglio, 1021; world food, 1142; world population trends, 704 Ney, E. P., and K. M. Merrill: Comet West

and the scattering function of cometary

dust, 1051

Ngai, S. H. See Berkowitz, B. A., et al.

Nicholson, C. See Kraig, R. P.

Nier, A. O. See Biemann, K., et al., page 72 See also McElroy, M. B., et al., pages 70 and 1295

Nier, A. O., and M. B. McElroy: Structure of the neutral upper atmosphere of Mars: results from Viking 1 and Viking 2, 1298 Nier, A. O., et al.: Isotopic composition of

the martian atmosphere, 68 Ninkovich, D., and W. L. Donn: Explosive Cenozoic volcanism and climatic implications, 899

Nishizuka, Y. See Sakakura, T., et al.

Nitrous oxide "analgesia": resemblance to opiate action, B. A. Berkowitz et al., 967 No desertification mechanism, E. Y. Kedar and J. Otterman, 747

Nobel prize for chemistry, The 1976 (Research News), R. N. Grimes, 709

Nobel prize for physiology or medicine, The 1976 (Research News), J. L. Melnick and R. F. Marsh, 927

Nobel prize in economics, The 1976 (Re-search News), K. Brunner, 594

Nobel prize in physics, The 1976 (Research News), J. D. Bjorken, 825

Nonverbal communication of aggression, P. PLINER et al. (Eds.), book review by M. Argyle, 1046

Norris, D. O., and W. A. Gern: Thyroxine-induced activation of hypothalamo-hypophysial axis in neotenic salamander larvae,

Norris, F. H. See Frederickson, R. C. A. North polar region of mars: imaging results from Viking 2, J. A. Cutts et al., 1329 Nottebohm, F., and A. P. Arnold: Sexual di-morphism in vocal control areas of the song-

bird brain, 211 Novitski, E.: The enigma of radiation effects

in Drosophila, 1387

Nowell, P. C.: The clonal evolution of tumor cell populations, 23

Nuclear and mitochondrial DNA replication during zygote formation and maturation in Sena et al., 433

Nuclear and particle physics at intermediate

energies, J. B. WARREN (Ed.), book review by K. M. Crowe, 1155 Nuclear inclusions in Paget's disease of bone, B. G. Mills and F. R. Singer, 201

Nuclear reactor accidents: long-term health effects (letters), B. Wolfe and F. von Hippel, 478

Nummedal, D. See Mutch, T. A., et al. NUTMAN, P. S. (Ed.), Symbiotic nitrogen fixation in plants, book review of, 418

0

O'Byrne, E. M. See Weiss, G., et al. O'Connor, J. S. See Stanford, H. M.

Oil and the world's future (editorial), P. H. Abelson, 681

Okada, Y., et al.: High concentration of GABA and high glutamate decarboxylase activity in rat pancreatic islets and human insulinoma, 620

O'Keefe, J. A.: Volcanic ash: terrestrial versus extraterrestrial, 190

Oldendorf, W.: book review of Blood-brain barrier in physiology and medicine, 518

Oldest horse brains: more advanced than previously realized, L. Radinsky, 626

OLESON, A., and S. C. BROWN (Eds.), The pursuit of knowledge in the early American republic, book review of, 416

Olsen, C. R. See Simpson, H. J., et al. Olsen, J. L., Jr.: A neglected literature (letter), 894

On working with the Soviets (editorial), W. D. Carey, 789 ÖPIK, E. J., Interplanetary encounters, book

review of, 609

Oppenheimer, N. J. See Hamilton, J. A., et

Orgel, L. E. See Biemann, K., et al., page 72 Orians, G. H.: book review of Island biology illustrated by the land birds of Jamaica, 1153

Oro, J. See Biemann, K., et al., page 72 Orton, G. S. See Aumann, H. H. Ostroy, S. E. See Pak, W. L., et al. Otterman, J. See Kedar, E. Y.

Ovum aging and pH imbalance as a cause of chromosomal anomalies in the hamster, K. Adachi and T. H. Ingalls, 946

Owen, T. See Biemann, K., et al., page 76 Owen, T., et al.: The atmosphere of Mars: the detection of krypton and xenon, 1293

OWENS, G. See BLUMBERG, S. A. Oyama, V. I. See Klein, H. P., et al.

Page charges, postal rate hikes, and member-

rage charges, postal rate hikes, and membership dues (letter), D. A. Windsor, 1377
Pak, W. L., et al.: Photoreceptor mutant of Drosophila: is sprotein involved in intermediate steps of phototransduction, 956
Paleocarthropology, R. H. TUTTLE (Ed.), book review by A. Mann, 516

Paleoecology of terrestrial plants, v. A. KRASI-

LOV, book review by D. L. Dilcher, 517 Palese, P., et al.: Genetic composition of a high-yielding influenza A virus recombinant: a vaccine strain against "swine" influenza, 334

Palluconi, F. D. See Kieffer, H. H., et al., pages 1341 and 1346

Palmberg, P. F. See Becker, B., et al. Palmer, L. G., and J. Gulati: Potassium accumulation in muscle: a test of the binding hypothesis, 521

Pantuck, E. J., et al.: Effect of charcoalbroiled beef on phenacetin metabolism in man, 1055

Pappas, B. A. See Kalat, J. W., et al. Pappas, B. A. See Nanat, J. W., et al. Parker, C. W. See Roberts, R., et al. Partridge, B. L. See Pitcher, T. J., et al. Pasternack, G. R. See Shin, H. S., et al. Patterson, W. See Mutch, T. A., et al., page

Paulin, J. See Agosin, M., et al. Pawson, D. L. See Barnes, A. T., et al.

PECORA, R. See BERNE, B. J.
Peer review: preventing "nepotism" (letter),
H. Z. Hill, 894

Pehek, J. O., et al.: Image modulation in corona discharge photography, 263 Pellegrino, M. A. See Moore, G. E., et al.

Penguins, G. G. SIMPSON, book review by G. E. Watson, 312

Perceptual analysis of moving patterns, J. Hochberg and P. Fallon, 1081 Perry, J. A. See Jupille, T. H.

Perspectives in probability and statistics, J. GANI (Ed.), book review by D. Hinkley,

Pert, A. See Pert, C. B., et al.

Pert, C. B., et al.: [D-Ala2]-met-enkephalinamide: a potent, long-lasting synthetic pen-

tapeptide analgesic, 330
Pesticide use: CAST review of EPA report (letter), M. M. Barnes, 998 "Petroleum plants" (letters), M. Clawson and

J. F. Morton, 678 Pettigrew, J. D. See Kasamatsu, T.

Phillips, I.: The "case" of Sir Cyril Burt (let-ter), 1377

Phosphatases in lake water: characterization of enzymes from phytoplankton and zooplankton by gel filtration, M. Jansson,

Photoreceptor mutant of Drosophila: is protein involved in intermediate steps of phototransduction, W. L. Pak et al., 956 Photoreceptor shedding is initiated by light in

the frog retina, S. Basinger et al., 1074 Physical basis for heterogeneous catalysis, The, E. DRAUGLIS and R. I. JAFFEE (Eds.), book review by R. L. Burwell, Jr., 1411 Piantadosi, C. See Majchrowicz, E., et al. Picosecond chemistry, G. E. Busch and P. M. Rentzepis, 276

Pieri, D. C. See Mutch, T. A., et al., page 1277

Pikler, G. M. See Spelsberg, T. C., et al., Pilcher, C. B. See Cruikshank, D. P., et al. Pimentel, D., et al.: Land degradation: effects on food and energy resources, 149

Pinkerton, T., and L. Travis: Computers:

Pinkerton, T., and L. Travis: Computers: minis and maxis (letter), 257 Pinther, M. See Conklin, H. C. Pirazzoli, P. A.: Sea level variations in the northwest Mediterranean during Roman times, 519

Pires-Ferreira, E. See Pires-Ferreira, J. W.,

Pires-Ferreira, J. W., et al.: Preceramic animal utilization in the Central Peruvian Andes, 483

Pitcher, T. J., et al.: A blind fish can school, 963

Plasma alpha amino-n-butyric acid to leucine ratio: an empirical biochemical marker of alcoholism, S. Shaw et al., 1057

Plasma membrane vesiculation: a new technique for isolation of plasma membranes, R. E. Scott, 743

PLINER, P., et al. (Eds.), Nonverbal communication of aggression, book review of, 1046 Plomin, R. See Jensen, A. R., et al.

Pluto: evidence for methane frost, D. P. Cruikshank et al., 835

Poe, M.: Antibacterial synergism: a proposal for chemotherapeutic potentiation between trimethoprim and sulfamethoxazole, 533

Poggio, T. See Marr, D. Poland, A., et al.: 3,4,3',4'-Tetrachloro azoxybenzene and azobenzene: potent inducers of aryl hydrocarbon hydroxylase,

Pollack, J. B. See Mutch, T. A., et al., pages 87 and 1277

Pollack, R.: book review of Teratomas and differentiation, 1272

Potassium accumulation in muscle: a test of the binding hypothesis, L. G. Palmer and J. Gulati, 521

Power, H. E. See Knoečni, V. J. Powers, E. L. See Ewing, D.

Preceramic animal utilization in the Central Peruvian Andes, J. W. Pires-Ferreira et al., 483

"Pregnancy prevention" (letter), V. Flyger,

Preliminary results from the Viking x-ray fluorescence experiment: the first sample from Chryse Planitia, Mars, P. Toulmin III et al., 81

Prenatal experience and avian development: brief auditory stimulation accelerates the hatching of Japanese quail, N. K. Woolf et al., 959

Presynaptic facilitation as a mechanism for behavioral sensitization in Aplysia, V. Castellucci and E. R. Kandel, 1176 Priano, D. J. See Kesner, R. P., et al.

Price, M. G. See Brooker, G., et al

Primate flicker sensitivity: psychophysics and electrophysiology, D. H. Kelley et al., 1077 Primate functional morphology and evolution, R. H. TUTTLE (Ed.), book review by A. Mann, 516

Progesterone binding to hen oviduct genome: specific versus nonspecific binding, T. C. Spelsberg *et al.*, 197

Programmed multiple development in thin-

layer chromatography, T. H. Jupille and J.

A. Perry, 288 Pseudoscopic illusion (letter), H. C. Conklin

and M. Pinther, 374
Ptashne, M., et al.: Autoregulation and function of a repressor in bacteriophage lambda,

Public involvement in scientific decision-making (letter), J. C. Cobb, 674

Pursuit of knowledge in the early American republic, The, A. OLESON and S. C. BROWN (Eds.), book review by K. B. Sterling, 416

Q and R

Quality of American life, The, P. E. CONVERSE and W. L. RODGERS, book review by C. Y. Glock, 52

Quantum electronics, H. RABIN and C. L. TANG (Eds.), book review by T. W. Hänsch, 610

Question of animal awareness, The, D. R. GRIFFIN, book review by W. A. Mason, 930 Question of checks and balances, A (editori-

Quetin, L. B. See Barnes, A. T., et al. Quigley, G. J., and A. Rich: Structural do-mains of transfer RNA molecules, 796

RABIN, H., and C. L. TANG (Eds.), Quantum electronics, book review of, 610
Rabkin, J. G., and E. L. Struening: Life

events, stress, and illness, 1013

Rabson, R. See Bhatia, C. R. Radinsky, L.: Oldest horse brains: more advanced than previously realized, 626

Radioactive waste disposal (letter), K. B. Krauskopf, 134

Radiohalos in coalified wood: new evidence relating to the time of uranium introduction and coalification, R. V. Gentry et al., 315

Radioimmunoassay for creatine kinase isoenzymes, R. Roberts *et al.*, 855
Rae, P. M. M.: Hydroxymethyluracil in eukaryote DNA: a natural feature of the pyrrophyta (dinoflatellates), 1062

RAINEY, R. C. (Ed.), Insect flight, book review of. 611

Rajan, S. S. See Srinivasan, R., et al. Rao, P. N. See Brownstein, K. R., et al. RAPOPORT, S. I., Blood-brain barrier in physi-

ology and medicine, book review of, 518 Rapport, M. M. See Karpiak, S. E., et al. Rare-earth manganites: surface-segregated platinum increases catalytic activity, J. J.

Croat et al., 318
Rattazzi, M. C. See Aronson, L. R., et al. Ray, W. H. See Tennent, D. M., et al. Read, D. H., et al.: Neuronal-visceral GM, gangliosidosis in a dog with β -galactosidase

deficiency, 442 Reasenberg, R. D. See Michael, W. H., Jr., et

Recent advances in aquatic mycology, E. B. G. JONES (Ed.), book review by A. S. Sussman, 833

Recombinant DNA research: a Faustian bar-gain? (letter), P. Siekevitz, 256 Recombinant DNA research: beyond the NIH

guidelines, C. Grobstein, 1133 Recycled oil (*letter*), D. A. Becker and J. D

Hoffman, 478

Reeves, R.: Ribosomal genes of Xenopus laevis: evidence of nucleosomes in transcriptionally active chromatin, 529
Regulation of acetylcholine synthesis: does

cytoplasmic acetylcholine control high affinity choline uptake?, D. J. Jenden et al., 635

Reid, M. See Levy, J. Reifschneider, D. See Pimentel, D., et al. Reinnervation of dentate gyrus by homologous afferents following entorhinal cortical lesions in adult rats, O. Steward, 426

Relaxation time versus water content: linear or nonlinear?, K. R. Brownstein et al., 213 Relaxin: a product of the human corpus luteum of pregnancy, G. Weiss et al., 948

Renin-angiotensis system and thirst, The: a re-evaluation, E. M. Stricker et al., 1169 Rentzepis, P. M. See Busch, G. E.

Report from the research community, A (edi-torial), P. H. Abelson, 481

Research News: artificial gene, 44; athero-sclerosis and cholesterol, 711; athero-44; atherosclerotic plaques, 592; automotive electronics and computerized engine control, 414; cancer chemotherapy, 310; carbon com-pounds and prediction of unusual structures, 413; cardiovascular disease, 511; coal liquefaction plant, 712; coal research, 172; coronary bypass surgery, 1263; drug pre-scribing and birth defects, 926; energy research, 307; heart attack and afterward,

1147; heart disease and its detection, 1029; heart disease and its epidemiology, 509; ho-mogeneous catalysis, 1150, 1261; hypertension, 821; infrared photochemistry, 45; Nobel prize for chemistry, 709; Nobel prize in economics, 594; Nobel prize in physics. 825; Nobel prize for physiology or medicine, 927; ozone layer and aerosols, 170; plants and gasoline, 46; pyrolysis-spec-trometry, 1403; solar energy and illumina-tion, 1405; solar politics, 1256; Viking mission, 819, 924

Residential energy use alternatives: 1976 to

2000, E. Hirst, 1247 Resing, H. A. See Foster, K. R., et al. Respiration of amphibious vertebrates, G. M. HUGHES (Ed.), book review by H. J. de Jongh, 313

Jongh, 313
Responses of infants to visually presented objects, P. C. Dodwell et al., 209
Revertants of human cells transformed by murine sarcoma virus, H. Y. Cho et al., 951
Reynolds, S. A. See Gentry, R. V., et al.
Rhim, J. S. See Cho, H. Y., et al.

Ribosomal genes of Xenopus laevis: evidence of nucleosomes in transcriptionally active

chromatin, R. Reeves, 529 Rice, J. M. See Martin, W. J., et al. Rich, A. See Klein, H. P., et al. See also Quigley, G. J.
Rich, C.: Federal funding of medical schools

Richter, C. F.: Earthquake light in focus (let-ter), 259

Rifkin, D. B.: Book review of Fundamental aspects of metastasis, 1154

Risk of communicable disease infection associated with wastewater irrigation in agricultural settlements, E. Katzenelson et al., 944 Ritchey, M. B. See Palese, P., et al.

ROBARDS, A. W. See GUNNING, B. E. S. Roberts, R., et al.: Radioimmunoassay for creatine kinase isoenzymes, 855

Robinson, A. L. (Research News): automotive electronics and computerized engine control, 414; homogeneous catalysis, 1150,

1261; infrared photochemistry, 45 Roche, M.: Early history of science in Spanish America, 806

Rochereau, S. See Pimentel, D., et al. Rod outer segment disk shedding in rat retina: relationship to cyclic lighting, M. M. La Vail 1071

RODGERS, W. L. See CONVERSE, P. E. Rose, H. J., Jr. See Baird, A. K., et al. See also Clark, B. C., et al. See also Toulmin, P., III, et al.

Rowe, C. D. See Clark, B. C., et al. Rowland, C. W. See Mutch, T. A., et al., page 1277

Rubin, L. See Denef, C., et al. Ruggieri, G. O.: Drugs from the sea, 491 Rushneck, D. R. See Biemann, K., et al., pages 72 and 76. See also Owen, T., et al.

review by H. Wright, 1271
Ryan, J. See Horowitz, P., et al.
Ryan, J. A. See Hess, S. L., et al., pages 78
and 1352

Saari, M. See Kalat, J. W., et al. SACHAR, E. J. (Ed.), Hormones, behavior, and psychopathology, book review of, 177 Sachs, B. D. See Aronson, L. R., et al. Sagan, C. See Mutch, T. A., et al., pages 87 and 1277

Sakakura, T., et al.: Mesenchyme-dependent morphogenesis and epithelium-specific cy todifferentiation in mouse mammary gland, 1439

SALAKHOVA, N. S. See TURAKULOV, YA. KH. et al.

Samis, R. See Pimentel, D., et al. Sanidine: predicted and observed monoclinicto-triclinic reversible transformations at high pressure, R. M. Hazen, 105 Sarma, P. S. See Devare, S. G., et al.

Sauer, R. T. See Ptashne, M., et al. Saunders, R. S. See Mutch, T. A., et al., page

Sawyer, C. See Ames, B. N., et al. Schaug, J. See Alies, B. N., et al.
Schiller, E. L. See Seegar, W. S., et al.
Schipper, L., and A. J. Lichtenberg: Efficient energy use and well-being: the Swedish example, 1001

Schmid, C. W. See Deininger, P. L. Schobert, H. H. See Mills, G. A., et al. Schopf, T. J. M.: book review of Jurassic envi-

ronments, 716 Schulman, J. A., and F. F. Weight: Synaptic transmission: long-lasting potentiation by a postsynaptic mechanism, 1437

Schulman, J. L. See Palese, P., et al.

Schwarz, M. See Knerer, G. Science and change: hopes and dilemmas (AAAS), A. Herschman, 599
Science Court experiment, The (letters), L.

M. Kushner and A. Kantrowitz, 6 Science in a political context: one view by a politician, J. W. Symington, 402

Science, values, and human judgment. K. R.

Hammond and L. Adeiman, 389 Scientific results of the Viking missions, G. A. Soffen, 1274

Scientists involved in environmental litigation

(letter), R. A. Horne, 1377 Scott, R. E.: Plasma membrane vesiculation: a new technique for isolation of plasma membranes, 743

Scott, R. F. See Shorthill, R. W., et al., pages 91 and 1309

SCOTT, R. W., and R. R. WEST (Eds.), Structure and classification of paleocommu-nities, book review of, 1410 Scott, T. K. See Mueller, S. C., et al.

Sea level variations in the northwest Mediterranean during Roman times, P. A. Piraz-

Search for organic and volatile inorganic compounds in two surface samples from the Chryse Plantia region of Mars, K. Biemann et al., 72

Search for the Viking 2 landing site, H. Masursky and N. L. Crabill, 62 Sedmak, J. J. See Sela, I., et al.

Seeds of dicotyledons, The, E. J. H. CORNER,

book review by S. Carlquist, 56 Seegar, W. S., et al.: A mallophaga, Trinoton anserinum, as a cyclodevelopmental vector for a heartworm parasite of waterfowl, 739 Seegmiller, J. E. See Skaper, S. D.

Seely, J. H. See Johnson, E. S., et al.

 Segal, D. See Bloom, F., et al.
 Sehgal, P. B., et al.: 5,6-Dichloro-1β-D-ri-bofuranosylbenzimidazole inhibits initiation of nuclear heterogeneous RNA chains in HeLa cells, 431

Sehlin, J. See Hellman, B., et al. Seiff, A., and D. B. Kirk: Structure of Mars' atmosphere up to 100 kilometers from the entry meausrements of Viking 2, 1300

RNA by a factor from interferon-treated cells, 527 Semb, A. See Likens, G. E., et al.

Sena, E., et al.: Nuclear and mitochondrial DNA replication during zygote formation and maturation in yeast, 433

Sergei Kovalev: a colleague in trouble (letter), T. Eisner and E. O. Wilson, 133 Serotonin depression, D. F. Kripke, 214

Sex-specific cannibalism in the rotifer As-planchna sieboldi, J. J. Gilbert, 730 Sexual dimorphism in vocal control areas of the songbird brain, F. Nottebohm and A. P. Arnold, 211

Shackleton, N. J. See Hays, J. D., et al.
Shapiro, I. I. See Michael, W. H., Jr., et al.
Shapley, D. (News and Comment): Currie charged with favoritism, 507; Lewis of National Bureau of Standards accused of plagiarism, 1401; National Science Board meetings to be public, 39; Soviet civil defense, 1141; Soviet nuclear test limit, 168; space and the future, 39; Tennessee Valley Authority today, 814 (erratum, 1402) Sharma, V. K. See Malinin, G. I., et al. Shavitt, I., and F. Tobin: The attraction of minicomputers (letter), 890

Shaw, S., et al.: Plasma alpha amino-n-butyric acid to leucine ratio: an empirical biochemical marker of alcoholism, 1057

Shaywitz, B. A. See Kalat, J. W., et al. Sheldon, R. B. See Boylen, C. W. Shepard, M. See Pimentel, D., et al. SHERMAN, M. I., and D. SOLTER (Eds.), Tera-

tomas and differentiation, book review of,

SHERWIN, M. J., A world destroyed, book review of, 174
Shields, L. M., and M. G. Anderson: The AAAS Southwestern and Rocky Mountain Division-how a regional division operates

(AAAS), 1407
Shimada, C. See Okada, Y., et al.
Shimazu, T., et al.: Cholinergic stimulation of the rat hypothalamus: effects on liver glycogen synthesis, 535

Shin, D. H. See Becker, B., et al.

Shin, H. S., et al.: Immunotherapy of cancer with antibody, 327
Shorthill, R. W., et al.: The environs of Vi-

king lander 2, 1309; The "soil" of Mars (Viking 1), 91

Short-period climatic fluctuation: effects on diatom biomass, S. A. Tont, 942 Shull, H.: The university tenure 'problem'

(editorial), 137 Shuval, H. I. See Katzenelson, E., et al. Sieburth, J. M., et al.: Dissolved organic matter and heterotrophic microneuston in the surface microlayers of the North Atlantic,

Siekevitz, P.: Recombinant DNA research: a Faustian bargain? (letter), 256

Simberloff, D.: Species turnover and equilibrium island biogeography, 572

Simmonds, P. G. See Biemann, K., et al.,

Simon, W. E. See Hess, S. L., et al., page 78 SIMPSON, G. G., Penguins, book review of, 312 Simpson, H. J., et al.: Man-made radionuclides and sedimentation in the Hudson River estuary, 179

Singer, F. R. See Mills, B. G.
Singh, M. M. See Levy, D. L., et al.
Sirover, M. A., and L. A. Loeb: Infidelity of
DNA synthesis in vitro: screening for potential metal mutagens or carcinogens, 1434

Skaper, S. D., and J. E. Seegmiller: Hypoxanthine-guanine phosphoribosyltransferase mutant glioma cells: diminished mono-amine oxidase activity, 1171

Sladen, W. J. L. See Seegar, W. S., et al. Sleep in mammals: ecological and constitutional correlates, T. Allison and D. V. Cicchetti, 732

SMITH, D. A. See CHADWICK, G. A.
Smith, D. H. See Gentry, R. V., et al.
Smith, E. A. See Pimentel, D., et al.
Smith, J. M. See Levy, D. L., et al.
Smith, S. V., and D. W. Kinsey: Calcium car-

bonate production, coral reef growth, and sea level change, 937 Snow, T. P., Jr.: book review of The dusty uni-

verse, 609 Snyder, S. H. See Meltzer, H. Y., et al.

Sobel, B. E. See Roberts, R., et al. Social science in the White House (editorial), A. Etzioni, 1119

Soderblom, L. A.: Viking orbital colorimetric images of Mars, preliminary results, 97 Sodium liquid ion exchanger microelectrode

used to measure large extracellular sodium transients, R. P. Kraig and C. Nicholson,

Soffen, G. A.: Scientific results of the Viking mission, 1274; Status of the Viking missions, 57

Sohi, S. S. See Murphy, D. W., et al. Soil and surface temperatures at the Viking landing sites, H. H. Kieffer, 1344 "Soil" of Mars (Viking 1), The, R. W. Shorthill et al., 91

Solar chromosphere and corona, The, R. G. ATHAY, book review by J. B. Zirker, 1048

SOLTER, D. See SHERMAN, M. I

Sørensen, B.: Dependability of wind energy generators with short-term energy storage,

Sosman, J. See Busse, W. W. Spanos, N. P., and J. Gottlieb: Ergotism and the Salem Village witch trials, 1390

Species preservation (editorial), P. A. Harcombe and P. L. Marks, 383

Species turnover and equilibrium island biogeography, D. Simberloff, 572

Specific population of gonadotrophs purified from immature female rat pituitary, A. C. Denef et al., 848

Spelsberg, T. C., et al.: Progesterone binding to hen oviduct genome: specific versus non-

specific binding, 197
Sphecid wasps of the world, R. M. BOHART and A. S. MENKE, book review by D. J. Brothers, 312

Spherules on shatter cone surfaces from the Vredefort structure, South Africa, N. C. Gay, 724

Spira, M. E., et al.: Electrotonic coupling: effective sign reversal by inhibitory neurons.

Spitzer, C. R. See Hargraves, R. B., et al., pages 84 and 1303. See also Shorthill, R. W., et al., pages 91 and 1309

Sporn, J. R., et al.: β-Adrenergic receptor involvement in 6-hydroxydopamine-induced supersensitivity in rat cerebral cortex, 624 Spray, D. C. See Spira, M. E., et al.

Srinivasan, R., et al.: Extended helical conformation newly observed in protein fold-

Stanford, H. M., and J. S. O'Connor: New York Bight project (letter), 678 Stanford, M. See Damadian, R., et al. Status of the Viking missions, G. A. Soffen,

Stedman, R. J. See Thom, G., et al. Stefano, G. B., et al.: Dopaminergic agents: influence on serotonin in the molluscan ner-

vous system, 539 Stein, G. S. See Kleinsmith, L. J. STEIN, G. S., and L. J. KLEINSMITH (Eds.),

Chromosomal proteins and their role in the regulation of gene expression, book review of 518 Steiner, P. M. See Hamilton, J. A., et al.

Steinetz, B. G. See Weiss, G., et al. Stephenson, J. R. See Devare, S. G., et al. Stereochemical requirements for intercalation of platinum complexes into double-stranded DNA's, S. J. Lippard et al., 726

Sterling, K. B.: book review of The pursuit of knowledge in the early American republic.

Stern, W. C. See Jacobs, B. L. Steward, O.: Reinnervation of dentate gyrus by homologous afferents following entorhinal cortical lesions in adult rats, 426 Stimmel, B. See Shaw, S., et al.

Straat, P. A. See Klein, H. P., et al. See also Levin, G. V.

Stratospheric ion chemistry and the 11-year variation in polar ozone, F. C. Fehsenfeld et al., 544

Streit, G. E. See Fehsenfeld, F. C., et al. Stricker, E. M., et al.: The renin-angiotensis system and thirst: a reevaluation, 1169

Structural basis for on- and off-center re-sponses in retinal ganglion cells, E. V. Famiglietti, Jr., and H. Kolb, 193 Structural domains of transfer RNA mole-

cules, G. J. Quigley and A. Rich, 796 Structure and classification of paleocommunities, R. W. SCOTT and R. R. WEST (Eds.), book review by R. M. May, 1410 Structure of Mars' atmosphere up to 100 ki-WEST (Eds.),

lometers from the entry measurements of Viking 2, A. Seiff and D. B. Kirk, 1300

Structure of the neutral upper atmosphere of Mars: results from Viking 1 and Viking 2, A. O. Nier and M. B. McElroy, 1298 Struening, E. L. See Rabkin, J. G. Study of comets, The, B. DONN et al. (Eds.),

book review by F. D. Miller, 515 Submergent macrophytes: growth under winter ice cover, C. W. Boylen and R. B. Sheldon. 841

Subtropical convergence fluctuations and quaternary climates in the middle latitudes of the Indian Ocean, A. W. H. Bé and J.-C. Duplessy, 419

Suga, N., and P. H.-S. Jen: Disproportionate tonotopic representation for processing CF-FM sonar signals in the mustache bat auditory cortex, 542

Suppression by 1,3-butanediol of the ethanol withdrawal syndrome in rats, E. Majchrowicz et al., 1181

Surface of Mars: the view from the Viking 2 lander, T. A. Mutch et al., 1277
Sussman, A. S.: book review of Recent ad-

vances in aquatic mycology, 833 Sutton, G. See Anderson, D. L., et al. Sweetnam, D. N. See Michael, W. H., Jr., et

Symbiotic nitrogen fixation in plants, P. s. NUTMAN (Ed.), book review by M. Alexan-

Symington, J. W.: Science in a political context: one view by a politician, 402

Synaptic facilitation and behavioral sensitization in *Aplysia*: possible role of serotonin and cyclic AMP, M. Brunelli *et al.*, 1178 Synaptic transmission: long-lasting potentia-

tion by a postsynaptic mechanism, J. A.

Synchronization of periodical cicada emergences, F. C. Hoppensteadt and J. B. Keller, 335

Tail-pinch stimulation: sufficient motivation for learning, G. F. Koob et al., 637 Täljedal, I.-B. See Hellman, B., et al.

Tamm, I. See Sehgal, P. B., et al. Tang, C. H. See Michael, W. H., Jr., et al.

TANG, C. L. See RABIN, H. Taniguchi, H. See Okada, Y., et al. Taylor, G. R. See Mutch, T. A., et al., 1277 Technical issues and the adversary process (letter), L. Lipson, 890

Technology policy and democracy, B. M. Casper. 29

Terhune, E. C. See Pimentel, D., et al. Tarr, C. E. See Brownstein, K. R., et al. Tedford, R. H. See Zimmerman, M. R. Temperatures of the martian surface and at-mosphere: Viking observation of diurnal

and geometric variations, H. H. Kieffer et al. 1346 Tennent, D. M., et al.: Impurities in labeled

diethylstilbestrol: identification of pseudodiethylstilbestrol, 1059

Terasaki, W. L. See Brooker, G., et al. Teratomas and differentiation, M. I. SHERMAN and D. SOLTER (Eds.), book review by R. Pollack, 1272 3,4,3',4'-Tetrachloro azoxybenzene and azo-

benzene: potent inducers of aryl hydrocarbon hydroxylase, A. Poland et al., 627 Thatcher, W.: Episodic strain accumulation in Southern California, 691

Theories of vision from al-Kindi to Kepler, D. C. LINDBERG, book review by A. G. Molland, 1047

Thermal stability of human DNA and chim-panzee DNA heteroduplexes, P. L. Deininger and C. W. Schmid, 846 Thom, G., et al.: Mailing labels: hot air, pa-

tience, and other suggestions (letters), 1116 Thorp, R. W. See Kevan, P. G., et al.

Threshold model of feeding territoriality and test with a Hawaiian honeycreeper, F. L. Carpenter and R. E. MacMillen, 639

Thyroid hormones, YA. KH. TURAKULOV et al., book review by A. Gorbman, 177
Thyroid hormones: effect of physiological

concentrations on cultured cardiac cells, J. S. Tsai and A. Chen, 202

Thyroxine-induced activation of hypotha-lamo-hypophysial axis in neotenic salamander larvae, D. O. Norris and W. A. Gern, Tibbetts, G. G. See Croat, J. J., et al. Tillman, J. E. See Hess, S. L., et al., pages 78 and 1352

Time-dependent disruption of morphine tolerance by electroconvulsive shock and fron-tal cortical stimulation, R. P. Kesner et al., 1079

Titanium(III) citrate as a nontoxic oxidationreduction buffering system for the culture of obligate anaerobes, A. J. B. Zehnder and K. Wuhrmann, 1165

Tobin, F. See Shavitt, I.
Toksöz, M. N. See Anderson, D. L., et al.
Tolson, R. H. See Michael, W. H., Jr., et al.
Tont, S. A.: Short-period climatic fluctuation: effects on diatom biomass, 942

Toulmin, P., III. See Baird, A. K., et al. See also Biemann, K., et al., page 72. See also

Clark B. C., et al.

Toulmin, P., III, et al.: Preliminary results from the Viking x-ray fluorescence experiment: the first sample from Chryse Planitia, Mars. 8

Trail marking by larvae of the eastern tent cat erpillar, T. D. Fitzgerald, 961 Travers, W. B., and P. R. Luney: Drilling, tankers, and oil spills on the Atlantic outer continental shelf, 791

Travis, L. See Pinkerton, T. Trier, R. M. See Simpson, H. J., et al.

Trpis, M. See Seegar, W. S., et al.
Trulson, M. E. See Jacobs, B. L., et al.
Truman, J. W., et al.: Hormonal release of programmed behavior in silk moths: prob-

able mediation by cyclic AMP, 1432 Trump, B. F. See Harris, C. C. et al

Trypanosomiasis: an approach to chemotherapy by the inhibition of carbohydrate catabolism, A. B. Clarkson, Jr., and F. H. Brohn, 204

Tsai, J. S., and A. Chen: Thyroid hormones: effect of physiological concentrations on cultured cardiac cells, 202

Tucker, R. B. See Mutch, T. A., et al. Tupin, J. P.: book review of Hormones, be-

havior, and psychopathology, 177

TURAKULOV, YA. KH., et al., Thyroid hormones, book review of, 177

Turek, F. W., et al.: Melatonin: effects on the circadian locomotor rhythm of sparrows. 1441

TUTTLE, R. H. (Ed.), Paleoanthropology, book review of, 516; Primate functional morphology and evolution, book review of, 516

U

Ultragiant urban aerosol particles, D. B. Johnson, 941

Ulus, I. H., and R. J. Wurtman: Choline administration: activation of tyrosine hydroxylase in dopaminergic neurons of rat brain, 1060

Unesco's tarnished image (editorial), P. H. Abelson, 897

U.S. universities and the world food problem, M. D. Whitaker and E. B. Wennergren, 497 University tenure "problem," The (editorial), H. Shull, 137

Utility accounting and energy policy (letter), L. S. Hyman, 1226

Values in education and society, N. T. FEATH-ER, book review by R. deCharms, 931 VandenHeuvel, W. J. A. See Tennent, D. M.,

Variations in the earth's orbit: pacemaker of the ice ages, J. D. Hays et al., 1121

Variations in writing posture and cerebral organization, J. Levy and M. Reid, 337
VAYDA, A. P. (Ed.), War in ecological perspective, book review of, 1270
Veghte, J. H. See Hill, R. W.

Vermilye, G.: Mass media intern program accepting applications (AAAS), 51

Vertebrate central nervous system: same neurons mediate both electrical and chemical inhibitions, H. Korn and D. S. Faber, 1166 Viking biological investigation, The: prelimi-

nary results, H. P. Klein et al., 99 Viking carbon assimilation experiments: interim report, The, N. H. Horowitz et al., 1321 Viking labeled release biology experiment: interim results, G. V. Levin and P. A. Straat,

Viking magnetic properties investigation: further results, R. B. Hargraves et al., 1303 Viking magnetic properties investigation: preliminary results, R. B. Hargraves et al., 84

Viking orbital colorimetric image of Mars: preliminary results, L. A. Soderblom, 97 Viking seismic experiment, The, D. L. Ander-

son et al., 1318 Volcanic ash: terrestrial versus extraterrestri-al, J. A. O'Keefe, 190 von Hippel, F. See Wolfe, B.

W

Wade, N. (News and Comment): animal rights, 162; Argentina and repression of scientists, 1397; Glomar Explorer and Rus-sian submarine, 1142; Hayflick's vaccine cells, 41; IQ and heredity, 916; nuclear power and European doubts, 164; recombi-nant DNA, 303, 705; Sergei Kovalev, 585, 1260; world food problem, 1142. See also Aronson, L. R., et al.

WAINWRIGHT, S. A., et al., Mechanical design in organisms, book review of, 933 Wald and the Cambridge City Council (letter),

G. Wald, 6 Wald, G.: Wald and the Cambridge City Coun-

cil (letter), 6
Walker, R. See Gentry, R. V., et al.
Wall, S. D. See Mutch, T. A., et al.
Walsh, J. (News and Comment): Biological Sciences Curriculum Study, 42; Congress and the budget process in an election year, 405; Congress and election impacts, 812; In-405; Congress and election impacts, 812; international Council of Scientific Unions, 587; Kistiakowsky's A Scientist in the White House, 1144; National Research Council cuts three committees, 706; Palau

and superport debated, 919; Senate class of 1976 and Ph.D.'s, 1145
Waltman, S. R. See Becker, B., et al.
Wang, R. T. See Halpern, M., et al.
Wang, W. C., et al.: Greenhouse effects due to man-made perturbations of trace gases.

685 War in ecological perspective, A. P. VAYDA (Ed.), book review by M. Harner, 1270 WARD, R. H., and K. M. WEISS (Eds.), The de-

mographic evolution of human populations.

book review of, 1046
Wardle, C. S. See Pitcher, T. J., et al.
WARREN, J. B. (Ed.), Nuclear and particle
physics at intermediate energies, book review of, 1155 Warzel, F. M. See Thom, G., et al.

Wasserman, R. H., et al.: Calcinogenic factor in Solanum malacoxylon: evidence that it is 1,25-dihydroxyvitamin D₃-glycoside, 853 Watson, G. E.: book review of Penguins, 312

WATSON, W. E., Cell biology of brain, book review of, 1154
Watt, D. C.: book review of A world destroyed, 174

Waxman, S., et al.: Antitumor drug inter-actions: additional data (letters), 1112

Weare, B. C. See Newell, R. E WEBER, D. J., and W. M. HESS (Eds.), The fun-

gal spore, book review of, 718 Webster, R. A. See Spelsberg, T. C., et al. Wegst, W. F., Jr., et al.: Air bags, safety, and Big Brother (letters), 994

Weiler, M. H. See Jenden, D. J., et al. Weight, F. F. See Schulman, J. A. Weinreb, H. J. See Levy, D. L., et al. Weiss, G., et al .: Relaxin: a product of the hu-

man corpus luteum of pregnancy, 948 WEISS, K. M. See WARD, R. H.

WEISS, L. (Ed.), Fundamental aspects of metastasis, book review of, 1154
Weitz, S.: book review of Gaze and mutual

gaze, 54

gaze, 54
Welch, J. See Sena, E., et al.
Weller, R. See Wegst, W. F., Jr., et al.
Wennergren, E. B. See Whitaker, M. D.
Western perspective on energy, A: a plea for rational energy planning, B. Christiansen and T. H. Clack, Jr., 578

WEST, R. R. See SCOTT, R. W. Wetherill, G. W.: book review of Inter-planetary encounters, 609

Wezeman, F. H.: 25-Hydroxyvitamin D₃: autoradiographic evidence of sites of action in epiphyseal cartilage and bone, 1069 Wheat gluten-schizophrenia findings, D. L.

Wheeler, W. B. See Carlson, D. A., et al. Whitaker, M. D., and E. B. Wennergren: U.S. universities and the world food prob-

lem, 497 White, W. F. See Johnson, E. S., et al. White, W. H., et al .: Formation and transport of secondary air pollutants: ozone and aero-

sols in the St. Louis urban plume, 187 Whitman, J.: Networks of amateurs for science (letter), 1228

Wilbert, J. See Layrisse, Z., et al. Wild boy of Aveyron, The. H. LANE, book review by D. J. Cohen, 311 WILLARD, B. C. (Ed.), Russell W. Porter,

book review of, 1271

Williams, S. C. See Simpson, H. J., et al. Willis, P.-J. See Sieburth, J. M., et al. Wilson, D. E. See Geluso, K. N., et al.

Wilson, E. O. See Eisner, T. Wilson, W. E., Jr. See White, W. H., et al. Windsor, D. A.: Page charges, postal rate hikes, and membership dues (letter), 1377 Wise, D. U. See Neukum, G.

Wolf, F. J. See Tennent, D. M., et al. Wolf, M. R. See Mutch, T. A., et al., page

Wolfe, B., and F. von Hippel: Nuclear reac-tor accidents: long-term health effects (let-

Wolfe, B. B. See Sporn, J. R., et al. Woodhead-Galloway, J. See Hukins, D. W. L., et al.

Woods, L. K. See Moore, G. E., et al. Woolf, N. K., et al.: Prenatal experience and avian development: brief auditory stimulation accelerates the hatching of Japanese quail, 959

World destroyed, A, M. J. SHERWIN. book review by D. C. Watt, 174
Wright, H.: book review of Russell W. Porter,

Wright, H. E., Jr.: The environmental setting for plant domestication in the Near East, 385

Wright, R. F. See Likens, G. E., et al. Wu, C.-F. See Pak, W. L., et al. Wu, K. C. See Lippard, S. J., et al. Wuhrmann, K. See Zehnder, A. J. B. Wurtman, R. J. See Ulus, I. H. Wyatt, G. R. See Truman, J. W., et al.

X, Y, Z

Yanagimachi, R.: book review of The biology of the sperm cell, 833 York, H. F.: book review of Energy and con-

flict, 514 Yung, Y. L. See McElroy, M. B., et al., rung, Y. L. See McEiroy, M. B., et al., pages 70 and 1295. See also Nier, A. O., et al., page 68. See also Wang, W. C., et al. Zaylskie, R. G. See Carlson, D. A., et al. Zehnder, A. J. B., and K. Wuhrmann: Titanium(III) citrate as a nontoxic oxidation-re-

duction buffering system for the culture of obligate anaerobes, 1165

Zimmerman, M. R., and R. H. Tedford: Histologic structures preserved for 21,300 years, 183

Zirker, J. B.: book review of The solar chromosphere and corona, 1048

